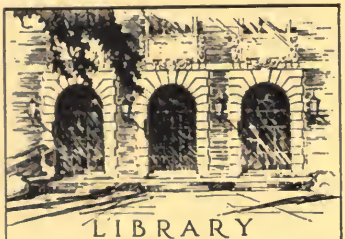

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FIELD MUSEUM OF NATURAL HISTORY.

PUBLICATION 203.

ZOÖLOGICAL SERIES. VOL. XIII.

CATALOGUE OF BIRDS OF THE AMERICAS

BY

CHARLES B. CORY
Curator of Department of Zoölogy.

PART II
NO. 2

CHICAGO, U. S. A.
DECEMBER 31, 1919.

1. CELEUS ELEGANS HELLMAYRI. *Berlepsch.*
2. CELEUS ELEGANS APPROXIMANS. *Cory.*
3. CELEUS ELEGANS ELEGANS. (*Müller*). (*Top of Head.*)

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CATALOGUE

OF

BIRDS OF THE AMERICAS AND THE ADJACENT ISLANDS

IN

FIELD MUSEUM OF NATURAL HISTORY

AND

Including all species and subspecies known to occur in North America, Mexico, Central America, South America, the West Indies, and Islands of the Caribbean Sea, the Galapagos Archipelago, and other islands which may properly be included on account of their faunal affinities.

BY

CHARLES B. CORY

Curator of Department of Zoölogy.

PART II

NO. 2

Family Trogonidæ — Family Ramphastidæ
Family Cuculidæ — Family Galbulidæ
Family Capitonidæ — Family Bucconidæ
Family Picidæ

CHICAGO, U. S. A.

DECEMBER 31, 1919.

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Genus **PHAROMACHRUS** De la Llave.

Pharomachrus De la Llave, Registro Trimestre, I, 1832, p. 48 (Type *P. mocinno* De la Llave).

***Pharomachrus mocinno mocinno** (*De la Llave*). QUETZAL.

Pharomachrus mocinno DE LA LLAVE, Registro Trimestre, I, 1832, p. 48 (Guatemala: Chiapas).

Pharomacrus mocinno GOULD, Mon. Trogon., ed. 2, 1875, pl. 1; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 431, part.

Trogon resplendens GOULD, Mon. Trogon., ed. I, 1838, pl. 21.

Pharomacrus paradiseus SCLATER and SALVIN, Ibis, 1859, p. 132 (Calderas, etc., Guatemala); SALVIN, Proc. Zool. Soc. Lond., 1860, p. 374; NEHRKORN, Journ. für Ornith., 1889, p. 286 (Honduras).

Pharomachrus mocinno RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 736.

Range: Southern Mexico to Honduras.

1: Guatemala.

***Pharomachrus mocinno costaricensis** (*Cabanis*). COSTA RICAN QUETZAL.

Pharomacrus costaricensis CABANIS, Journ. für Ornith., 1869, p. 313, footnote (Costa Rica); GOULD, Mon. Trogon., ed. 2, 1875, pl. 1 and text.

Pharomacrus mocinno costaricensis BANGS, Proc. N. E. Zool. Club, III, 1902, p. 31 (Boquete and Vol. Chiriqui); FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 264 (Coliblanco, Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 739.

Range: Costa Rica and western Panama; Nicaragua?

8: Costa Rica (Vol. Turrialba 6, Limon 1, Coliblanco 1).

***Pharomachrus antisiensis** (*D'Orbigny*). D'ORBIGNY'S TROGON.

Trogon antisiensis D'ORBIGNY, Voy. Amer. Merid., Ois., 1835–1844, p. 381, pl. 66 (Yungas, Bolivia).

Pharomacrus antisianus GOULD, Mon. Trogon., ed. 2, 1875, pl. 2 and text; TACZANOWSKI, Orn. Pérou, III, 1886, p. 177.

Pharomacrus peruvianus GOULD, Mon. Trogon., ed. 1, 1838, pl. 2 and text.

Trogon fulgidus GRAY, Gen. Bds., 1845, I, p. 71.

Pharomacrus antisiensis GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 433; GOODFELLOW, Ibis, 1902, p. 212 (Intag and Baeza, western Ecuador).

Pharomachrus antisiensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 735, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 313 (San Antonio and Buena Vista, Colombia).

Range: Colombia and Venezuela to Ecuador, Peru and Bolivia.

4: Venezuela (Maracay 2, "Venezuela" 2).

Pharomachrus festatus *Bangs*. BANG'S TROGON.

Pharomachrus festatus BANGS, Proc. Biol. Soc. Wash., XIII, 1899, p. 92 (Chirua, Santa Marta, Colombia, alt. 7000 ft.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 735, in key.

Range: Sierra Nevada de Santa Marta region, northern Colombia.

***Pharomachrus auriceps** (*Gould*). GOLDEN-HEADED TROGON.

Trogon (Calurus) auriceps GOULD, Ann. & Mag. Nat. Hist., (I) IX, 1842, p. 238 (Quito, Ecuador).

Pharomacrus auriceps GOULD, Mon. Trogon., ed. 2, 1875, pl. 4 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 434, erroneous descr. of adult male; GOODFELLOW, Ibis, 1902, p. 212, crit. (Ecuador).

Tanypeplus heliactin CABANIS and HEINE, Mus. Hein., IV, 1863, p. 207 (Nanegal and Pallatanga, eastern Ecuador).

Pharomacrus auriceps heliactin BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1884, p. 308 (Cayandeled, western Ecuador), crit.; *Id.*, 1885, p. 107.

Trogon (Calurus) hargitti OUSTALET, Le Nat., Ann., 13, (2) V, 1891, p. 261 (int. Venezuela).

Pharomachrus auriceps RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 735, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 313 (San Antonio; Cerro Munchique; La Florida; Almaguer; Miraflores; Salento; Subia, Colombia).

Range: Ecuador, Peru, Colombia and Venezuela.

1: Ecuador (Mindo).

Pharomachrus xanthogaster[a] *Turati and Salvadori*. YELLOW-BELLIED TROGON.

Pharomacrus xanthogaster TURATI and SALVADORI, Proc. Zool. Soc. Lond., 1874, p. 652 (Bogotá, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 734, footnote; OUSTALET, Nouv. Archiv. Mus. Paris, (3) VIII, 1895, p. 229, pl. 8.

Range: Colombia (Bogotá Region).

***Pharomachrus pavoninus** (*Spix*). PAVONINE TROGON.

Trogon pavoninus SPIX, Av. Bras., I, 1825–26, p. 47, pl. 35 ("in sylvis Tabatingue et Maribitanas," Brazil); GOULD, Mon. Trogon., ed. 1, 1838, pl. 23 and text; DESCOURTILZ, Orn. Bras., 1852, pl. 16, fig. 1.

[a] *Pharomachrus xanthogaster* TURATI and SALVADORI: Similar to *P. auriceps*, but lower under parts (abdomen, etc.) orange-yellow instead of red. It may prove to be a color variety of *P. auriceps*.

Pharomacrus pavoninus GRANT, Cat. Bds. Brit. Mus., XVIII, 1892, p. 426; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 206.

Pharomachrus pavoninus HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen XXII, 1906, p. 593; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911 p. 735, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917 p. 313 (Florencia, Caqueta region, Colombia).

Range: Brazil (Upper Amazon region), eastern Peru, Ecuador and Colombia (Caqueta region).

2: Brazil ("Upper Amazon") 1; Ecuador 1.

Genus **LEPTUAS** Cabanis and Heine.

Leptuas Cabanis and Heine, Mus. Hein., IV, 1863, pp. 185, 206 (Type *Trogon neoxenus* Gould).

Euptilotis (not *Euptilotus* Reichenbach, 1850) Gould, Mon. Trogon., ed. 2, 1875, text to pl. 6 (Type *T. neoxenus*).

*Leptuas neoxenus (*Gould*). EARED TROGON.

Trogon neoxenus GOULD, Mon. Trogon., ed. 1, 1838, pl. 25 and text (Mexico).

Calurus neoxenus GOULD, Mon. Trogon., ed. 1, 1838, Synop. Gen. *Calurus* sp. 5; BONAPARTE, Consp. Av., I, 1850, p. 152.

Euptilotis neoxenus GOULD, Mon. Trogon., ed. 2, 1875, pl. 6 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 437; ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 34 (La Pinita, N. Chihuahua); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 485.

Leptuas neoxenus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 741.

Range: Mountains of northwestern Mexico.

†12: Mexico (Barbacoa 4, Coyotes 3, Chihuahua 5).

Genus **TEMNOTROGON** Bonaparte.

Temnotrogon Bonaparte, Consp. Voluc. Zygod., 1854, p. 14 (Type *Trogon roseigaster* Vieillot).

*Temnotrogon roseigaster (*Vieillot*). HAITIAN TROGON.

Trogon roseigaster VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 314 (Santo Domingo, "Mexico"); GOULD, Mon. Trogon., ed. 1, 1838, pl. 20 and text *Id.*, ed. 2, 1875, pl. 32.

Temnotrogon roseigaster CORY, Bds. Haiti and San Domingo, 1885, p. 95, pl. 13; *Id.*, Auk, 1886, p. 360; *Id.*, Bds. West Indies, 1889, p. 155; CHERRIE, Contr. Orn. San Domingo, 1896, p. 19; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 791.

Tmetotrogon rhodogaster GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 438.

Range: Haiti and San Domingo, Island of Haiti.

†20: San Domingo (Aguate 7, La Vega 13).

Genus **PRIOTELUS** Gray.

Priotelus Gray, List Gen. Bds., 1840, p. 10 (Type *Trogon temnurus* Temminck).

*Priotelus temnurus temnurus (*Temminck*). CUBAN TROGON.

Trogon temnurus TEMMINCK, Pl. Col., III, 55, 1825, pl. 326 and text (Havana, Cuba); GOULD, Mon. Trogon., ed. 1, 1838, pl. 19 and text.

Priotelus temnurus CORY, Auk, 1886, p. 360; *Id.*, Bds. West Indies, 1889, p. 155; *Id.*, Cat. West Ind. Bds., 1892, pp. 103, 128, 142; CHAPMAN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 299, crit.

Prionotelus temnurus GOULD, Mon. Trogon., ed. 2, 1875, pl. 33 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 439.

Temnurus silens HARTLAUB, Naumannia, 1852, p. 51.

Priotelus temnurus temnurus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 794.

Range: Island of Cuba, Greater Antilles.

†13: Cuba (Palacios 3, San Diego de los Baños 6, "Cuba" 4).

Priotelus temnurus vescus (*Bangs and Zappey*). ISLE OF PINES TROGON.

Prionotelus temnurus vescus BANGS and ZAPPEY, Am. Nat., XXXIV, No. 460, 1905, p. 204 (Almacigos, Isle of Pines, Cuba).

Priotelus temnurus vescus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 795; TODD, Ann. Carnegie Mus., X, 1916, p. 242 (Isle of Pines).

Range: Isle of Pines, Cuba.

Genus **TROGONURUS** Bonaparte.

Trogonurus Bonaparte, Ann. Sci. Nat. (Zool.), Ser. 4, I, 1854, p. 130 (nom. nud.); Ateneo Italiano, No. 8, 1854 (Type as fixed by Gray, 1855, *Trogon collaris* Vieillot).

*Trogonurus mexicanus (*Swainson*) MEXICAN TROGON.

Trogon mexicanus SWAINSON, Philos. Mag., N. S. I, 1827, p. 440[a] (Temescaltepec, Mexico); *Id.*, Zool. Illustr., Ser. 2, 1831–33, pls. 82 (immature male), 107 (adult female); GOULD, Mon. Trogon., ed. 1, 1838, pls. 1, 2, and text; *Id.*, ed. 2, 1875, pl. 7 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 444; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 487.

Trogon glocitans LICHTENSTEIN, Journ. für Ornith., 1863, p. 55.

Trogonurus mexicanus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 765.

Range: Highlands of Mexico and Guatemala.

6: Mexico (Oaxaca) 1; Guatemala (Tecpam 2, "Guatemala" 3).

*Trogonurus personatus (*Gould*). MASKED TROGON.

Trogon personata GOULD, Ann. & Mag. Nat. Hist., (1) IX, 1842, p. 237 (Peru)

Trogon personatus GOULD, Mon. Trogon, ed. 2, 1875, pl. 10 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 446; ALLEN, Bull. Am. Mus. Nat. Hist.

[a]Adult female.

XIII, 1900, p. 135 (Valparaiso, Colombia); BANGS, Proc. Biol. Soc. Wash., XIII, 1899, p. 93 (Macatama, Colombia); CHUBB, Bds. British Guiana, I, 1916, p. 431.

Trogonurus personatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 763, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 313 (Puerto Valdivia; La Frijolera; Cocal; Gallera; Sta. Elena; El Eden; Fusugasuga; Enconosa (near Bogotá), Colombia; Inca Mine, east Peru).

Range: Colombia, Venezuela, British Guiana, Ecuador, Peru and Bolivia.

7: "Colombia" 4; Venezuela (Paramo de Tama) 2; Peru (Poco Tambo) 1.

***Trogonurus assimilis** (*Gould*).[a] ANDEAN MASKED TROGON.

Trogon assimilis GOULD, Proc. Zool. Soc. Lond., 1846, p. 67 (Peru).

(?) *Trogon heliothrix* TSCHUDI, Archiv. für Naturg., 1844, p. 300 (no locality).

(?) *Trogon personatus heliothrix* TACZANOWSKI, Orn. Pérou, III, 1886, p. 167.

(?) *Trogon propinquus* CABANIS and HEINE, Mus. Hein., IV, 1863, p. 175 (Puellaro, Ecuador).

(?) *Trogon personatus propinquus* BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1884, p. 307, crit. (Cayandeled and Chaguarpata, Ecuador).

Trogonurus assimilis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 314, crit. (Paramillo Trail, 11000 ft.; Laguneta; Santa Isabel; Almaguer; Valle de las Pappas; El Piñon, Colombia).

Range: Colombia, Ecuador and Peru.

3: Peru (Molinopampa).

***Trogonurus collaris collaris** (*Vieillot*). COLLARED TROGON.

Trogon collaris VIEILLOT, Nouv. Dict. d'Hist., Nat. VII, 1817, p. 320 (Cayenne); GOULD, Mon. Trogon., ed. 1, 1838, pl. 5 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 448; TACZANOWSKI, Orn. Pérou, III, 1886, p. 163; BERLEPSCH, Nov. Zool., XV, 1908, p. 277 (Ipousin, R. Approuague, Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1912, p. 208 (Rio Jamuchin; Rio Jaru). STONE, Proc. Acad. Nat. Sci. Phila., 1899, p. 305 (Nevada de Tolima, Colombia).

Trogon curucui curucui HELLMAYR, Nov. Zool., XIII, 1906, p. 41 (Caparo, Trinidad).[b]

Trogon rosalba DESCOURTILZ, Orn. Bras., 1852, pl. 17, fig. 1.

Trogon exoptatus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 179 (Venezuela).

Trogon casteneus SPIX, Av. Bras., I, 1824, p. 48, pl. 47 (female).

Trogon eytoni FRASER, Proc. Zool. Soc. Lond., 1856, p. 368.

[a] Dr. Chapman (*l. c.*) has revived this form and considers it to be a zonal representative of *T. personatus*, inhabiting the temperate zone of the higher regions. The males differ from *personatus*, chiefly in having the white bars of the outer pairs of rectrices much less pronounced, more broken, and often almost obsolete; the bill is also smaller. Three specimens from Molinopampa, Peru, appear to represent this form, while a single male from Poco Tambo, Peru (at a lower altitude) does not differ from *T. personatus*.

[b] According to Hellmayr (*l. c.*) *curucui* is the proper name for this species. In this connection see Berlepsch (*l. c.*) and Ridgway (*l. c.*, footnote).

Trogonurus collaris RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 763, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 315 (many localities in Colombia).

Range: Guiana, Trinidad, Tobago, Venezuela, Colombia, east Ecuador, east Peru and Bolivia.

8: Colombia (Antioquia 1, "Colombia" 2); Venezuela (Maracay) 1; Tobago 4.

Trogonurus collaris virginalis[a] (*Cabanis and Heine*). PALLATANGA COLLARED TROGON.

Trogon virginalis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 173 (Pallatanga, western Ecuador); SALVADORI and FESTA, Boll. Mus. Torino, XV, 1900, p. 17 (Rio Peripa, Ecuador).

T[rogon] curucui virginalis HELLMAYR, Nov. Zool., XIII, 1906, p. 41, in text.

Range: Western Ecuador.

***Trogonurus elegans** (*Gould*). ELEGANT TROGON.

Trogon elegans GOULD, Proc. Zool. Soc. Lond., II, 1834, p. 26 (Guatemala or Mexico); SALVIN, Ibis, 1866, p. 194; *Id.*, 1872, p. 313 (Nicaragua); GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 449; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 489; DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 88 (Guatemala); CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 557 (Costa Rica).

Trogonurus elegans RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 773.

Range: Pacific slope of Central America from Guatemala to Costa Rica.

1: Guatemala (Zacapa).

***Trogonurus ambiguus ambiguus** (*Gould*). COPPERY-TAILED TROGON.

Trogon ambiguus GOULD, Proc. Zool. Soc. Lond., 1835, p. 30 (northern Mexico); *Id.*, Mon. Trogon., ed. 1, 1838, pl. 4 and text; *Id.*, ed. 2, 1875, pl. 8 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 451, part; Swarth, Pacific Coast Avi., No. 10, 1914, p. 32 (Arizona records).

Trogonurus ambiguus ambiguus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 768.

Range: Highlands of Mexico to southern Arizona and Rio Grande Valley, Texas.

8: Mexico (San Luis Potosi 4, Tampico 1, Tamaulipas 2, Arizona Cochise Co.) 1.

Trogonurus ambiguus goldmani (*Nelson*). GOLDMAN'S TROGON.

Trogon ambiguus goldmani NELSON, Proc. Biol. Soc. Wash., XII, 1898, p. 8 (Maria Madre Island, Tres Marias Group, west of Mexico).

[a] According to Salvadori and Festa and Hellmayr this form can be readily distinguished by having the dark band on the tail larger than the white band. The emale has the chin blackish. I have not seen specimens of this bird.

Trogonurus ambiguus goldmani RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 772.

Range: Tres Marias Islands, off western Mexico.

***Trogonurus puella** (*Gould*). JALAPA TROGON.

Trogon puella GOULD, Proc. Zool. Soc. Lond., 1845, p. 18 (Escuintla, "S. Am.," i.e., western Guatemala); GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 452; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 491; CHAPMAN, Bull. Am. Mus. Nat. Hist., X, 1898, p. 34 (Jalapa); FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 265 (Guayabo, Costa Rica).

Trogonurus puella RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 775.

Range: Southern Mexico to western Panama.

†18: Guatemala 3; Costa Rica (Limon 9, Guayabo 2, "Costa Rica" 2); Nicaragua (San Raphael) 2.

***Trogonurus aurantiiventris aurantiiventris** (*Gould*). ORANGE-BELLIED TROGON.

Trogon aurantiiventris GOULD, Proc. Zool. Soc. Lond., 1856, p. 107 (Veragua, western Panama); *Id.*, Mon. Trogon., ed. 2, 1875, pl. 12 and text.

Trogon auranteiventris GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 454.

Trogonurus aurantiiventris aurantiiventris RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 778.

Range: Costa Rica to western Panama.

2: Costa Rica 1; Panama 1.

Trogonurus aurantiiventris underwoodi (*Bangs*). UNDERWOOD'S TROGON.

Trogon underwoodi BANGS, Proc. N. E. Zool. Club, IV, 1908, p. 24 (Volcan de Miravalles, northwestern Costa Rica).

Trogonurus aurantiiventris underwoodi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 780.

Range: Mountains of northwestern Costa Rica.

***Trogonurus curucui curucui** (*Linnæus*). BLACK-THROATED TROGON.

Trogon curucui LINNÆUS, Syst. Nat., ed. 12, 1766, p. 167 (South America); IHERING, Aves do Brazil, 1907, p. 157.

Trogon rufus GMELIN, Syst. Nat., I, 1788, p. 404; BERLEPSCH, Nov. Zool., XV, 1908, p. 277 (Cayenne); CHUBB, Ibis, 1910, p. 270 (Sapucay, Paraguay); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 208 (Rio Guama; Rio Tapajos; Rio Purús; Rio Jamunda, Brazil); CHUBB, Bds. British Guiana, I, 1916, p. 433; DABBENE, Bull. Soc. Physis, I, No. 6, 1914, p. 319 (Missiones, northeastern Argentina, etc.).

Trogon atricollis VIEILLOT, Nov. Dict. d'Hist. Nat., VIII, 1817, p. 318 (Guiana, etc.); GOULD, Mon. Trogon., ed. I, 1838, pl. 8 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 455, part.

Trogon chrysochlorus PELZELN, Sitz. Ak. Wien, XX, 1856, pp. 496, 505 (Ypanema, Brazil).[a]

Trogon atricollis atricollis HELLMAYR, Nov. Zool., XIII, 1906, p. 380 (Pará District).

Trogon splendidus BERTONI, Av. Nuev. Paraguay, 1901, p. 35 (Alto Paraná, Paraguay).

Trogon sulphureus SPIX, Av. Bras., I, 1824–26, pl. 38, fig. I (male).

Trogon rufus rufus HELLMAYR, Nov. Zool., XVII, 1910, p. 387 (Rio Madeira); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Trogonurus curucui curucui RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 764, in key; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 60 (Paramaribo, Cayenne).

Range: South America (except in western Colombia and western Ecuador) south to eastern Peru, Paraguay, northeastern Argentina (Missiones), and the greater part of Brazil from Pará southward.

3: British Guiana.

Trogonurus curucui cupreicauda[b] *Chapman*. COLOMBIAN BLACK-THROATED TROGON.

Trogonurus curucui cupreicauda CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 606 (Bogado Choco, Colombia); *Id.*, XXXVI, 1917, p. 315 (Alto Bonito; Bogado; Juntas de Tamana; San José; Barbacoas; Puerto Valdivia; west of Honda, western Colombia).

Range: Western Colombia in tropical zone from lower Magdalena and lower Cauca Valleys to the coast; northwestern Ecuador.

***Trogonurus curucui tenellus** (*Cabanis*). GRACEFUL TROGON.

Trogon tenellus CABANIS, Journ. für Ornith., 1862, p. 173 (Costa Rica); GOULD, Mon. Trogon., ed. 2, 1875, pl. 15 and text.

Trogon atricollis tenellus RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 513 (Nicaragua); BANGS, Auk, 1901, p. 360 (Panama); *Id.*, 1907, p. 294 (Costa Rica).

Trogon atricollis SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 493, part.

Race B, *Trogon tenellus* GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 458.

(?) *Trogon chrysomelas* RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 513 (Rio Escondito, Nicaragua).[c]

Trogonurus curucui tenellus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 781; STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 257 (Gatun, Panama Canal Zone).

[a] Southern birds may prove separable on account of their somewhat larger size and less golden upper parts (*cf.*, Hellmayr, Nov. Zool., XIII, 1906, p. 380).

[b] *Trogonurus curucui cupreicauda* Chapman: Similar to *T. c. curucui*, but exposed upper portions of six inner tail feathers rich copper-bronze; bars of three outer pairs of tail feathers wider; wing coverts more broadly barred; no white between green breast and orange abdomen.

[c] *Cf.*, Ridgway (*l. c.*), pp. 783–784, foot note.

Range: Southern Honduras to Panama.

†13: Costa Rica (Boruca 4, Orosi 4, Limon 1, "Costa Rica" 2); Nicaragua (San Emilis) 2.

***Trogonurus variegatus** (*Spix*). PURPLE-BREASTED TROGON

Trogon variegatus SPIX, Av. Bras., I, 1824, p. 49, pl. 38a ("Brasilia"); Mon. Trogon., ed. I, 1838, pl. 5 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 468; *Id.*, Ibis, 1911, p. 324 (Paraguay and southern Brazil); IHERING, Aves do Brazil, I, 1907, p. 159 (Matto Grosso, Bahia, Rio de Janeiro, etc., Brazil); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 209 (Maranhão, Brazil); DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 319 (northern Argentina, Prov. Juju, Prov. Salta, etc.).

Trogon behni GOULD, Mon. Trogon., ed. 2, 1875, pl. 20 and text.

Range: Northeastern to southern Brazil; Paraguay; Bolivia, and northern Argentina.

2: Brazil (Bahia 1, "Brazil" 1).

***Trogonurus bolivianus** (*Grant*). BOLIVIAN TROGON.

Trogon bolivianus GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 470, pl. XV (Cosnipata, Peru).

Trogonurus bolivianus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 316, crit. (La Morelia; near Florencia, Colombia).

Range: Ecuador, Peru and southern Colombia.

1: Peru (Chunchamayo).

***Trogonurus surrucura** (*Vieillot*). SURRUCURA TROGON.

Trogon surrucura VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 321 (Paraguay); GOULD, Mon. Trogon., ed. I, 1838, pl. 15 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 471; IHERING, Aves do Brazil, 1907, p. 159; CHUBB, Ibis, 1910, p. 270 (Paraguay); GRANT, Ibis, 1911, p. 324 (northern Argentina).

Range: Paraguay, northern Argentina and southern Brazil.

3: Brazil (São Paulo) 2; Argentina (Santa Anna, Terr. Missiones) 1.

***Trogonurus aurantius** (*Spix*). ORANGE-BREASTED TROGON.

Trogon aurantius SPIX, Av. Bras., I, 1824, p. 47, pl. 36 (Rio de Janeiro); GOULD, Mon. Trogon., ed. I, 1838, pl. 14 and text; *Id.*, ed. 2, 1875, pl. 24 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 471; DESCOURTILZ, Orn. Bras., 1852, pl. 16, fig. 2; IHERING, Rev. Mus. Paulista, VI, 1904, p. 334 (Paraguay); *Id.*, Aves do Brazil, I, 1907, p. 159 (Rio de Janeiro, Minas Geraes, São Paulo, Brazil; Paraguay; etc.).

Trogon splendidus BERTONI, Aves Nuev. Paraguay, 1901, p. 35 (Paraguay).

Range: Southeastern and southern Brazil, Paraguay, Guiana?.[a]

1: "Brazil."

[a] *Cf.*, Grant (*l. c.*), also Brabourne and Chubb, Bds. S. Am., I, 1912, p. 150. I have not seen specimens from Guiana.

Genus **TROGON** Brisson.

Trogon Brisson, Orn., I, 1760, p. 42; *Id.*, IV, 1760, p. 164, pl. 16, fig. 1 (Type as fixed by Stone, Auk, 1907, p. 192,— *Trogon viridis* Linnæus = *T. strigilatus* Linnaeus).

*Trogon strigilatus strigilatus *Linnæus*. GREEN-BACKED TROGON.

Trogon strigilatus LINNÆUS, Syst. Nat., ed. 12, 1766, p. 167 (Cayenne).

Trogon viridis GOULD, Mon. Trogon., ed. 2, 1875, pl. 21 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 458; GOELDI, Alb. Aves. Amazon, Pt. 3, 1905, pl. 28, fig. 6; HELLMAYR, Nov. Zool., XIII, 1906, p. 42 (Trinidad); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 198 (Guinipa, northeastern Venezuela); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 208 (Brazil).

Trogon viridis viridis HELLMAYR, Nov. Zool., XVIII, 1910, p. 387 (Borba, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Trogon strigilatus strigilatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 751, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 316 (Morelia; Florencia; Villavicencio; Buena Vista, eastern Colombia); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 60 (Paramaribo, Surinam).

Range: South America, from eastern Colombia to the Guianas, Trinidad and Pará, and southward in greater portion of Brazil to Peru and Bolivia.

†15: British Guiana 7; Dutch Guiana 2; Brazil (Rio Branco) 5; Peru (Riojas) 1.

*Trogon strigilatus chionurus (*Sclater and Salvin*). WHITE-TAILED TROGON.

Trogon chionurus SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1870, p. 843 (Lion Hill, Panama); GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 460.

Trogon eximus LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., X, 1874, p. 11 (Panama).

Trogon strigilatus chionurus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 754; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 317 (Tropical zone west of the eastern Andes, Colombia; numerous localities given); Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 257 (Gatun, Panama Canal Zone).

Range: Panama, Colombia (west of the eastern Andes) and western Ecuador.

1: Panama (Veragua).

*Trogon citreolus *Gould*. CITREOLINE TROGON.

Trogon citreolus GOULD, Proc. Zool. Soc. Lond., 1835, p. 30 (no type locality given);[a] *Id.*, Mon. Trogon., ed. 1, 1838, pl. 13 and text; *Id.*, ed. 2, 1875, pl. 26 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 461; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 759.

[a] I suggest State of Colima for type locality.

Range: Pacific slope of Mexico, from state of Sinaloa, southward to state of Chiapas and territory of Tepic.

4: Mexico (Colima).

***Trogon bairdii** *Lawrence*. BAIRD'S TROGON.

Trogon bairdii LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., IX, 1870, p. 119 (San Mateo, western Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 752.

Trogon bairdi GOULD, Mon. Trogon., ed. 2, 1875, pl. 23 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 461; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 496.

Range: Southwestern Costa Rica to western Panama.

2: Costa Rica (Boruca 1, Palama 1).

***Trogon melanocephala melanocephala** (*Gould*). BLACK-HEADED TROGON.

Trogon melanocephala GOULD, Mon. Trogon., ed. 1, 1838, pl. 12 (Tamaulipas, Mexico).

Trogon melanocephalus GOULD, Mon. Trogon., ed. 2, 1875, pl. 27 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 462, part; RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 515; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 498, part; DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 88 (Los Amates and Gualan, Guatemala).

Trogon melanocephalus melanocephalus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 756.

Range: Eastern Mexico from state of Tamaulipas (Tampico, etc.) southward to eastern Nicaragua and northeastern Costa Rica.

†12: Mexico (Achotal, Vera Cruz 1; Yucatan 4); Guatemala (Gualan, Zacapa 3; Los Amates 4).

***Trogon melanocephala illætabilis** *Bangs*. SLATY-HEADED TROGON.

Trogon melanocephalus illætabilis BANGS, Proc. Biol. Soc. Wash., XXII, 1909, p. 30 (Bolson, western Costa Rica); CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 560; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 759.

Range: Western Costa Rica, western Nicaragua and San Salvador

†14: Nicaragua (San Gerónimo) 13; San Salvador 1.

Genus **CHRYSOTROGON** Ridgway.

Chrysotrogon Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 784 (Type *Trogon caligatus* Gould).

Microtrogon (not of Bertoni, 1901) Goeldi, Bol. Mus. Goeldi, V, 1908, p. 92 (Type *Trogon ramoniana* Deville and Des Murs).

***Chrysotrogon caligatus caligatus** (*Gould*). GARTERED TROGON.

Trogon caligatus GOULD, Mon. Trogon., ed. 1, 1838, pl. 7 and text (no type locality); SCLATER, Proc. Zool. Soc. Lond., 1856, p. 286 (Cordova, Vera Cruz, Mexico); *Id.*, 1860, p. 284 (Babahoyo, Ecuador); STONE, Proc. Acad. Nat. Sci. Phila., 1890, p. 206 (Tunkas, Yucatan); GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 465; RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 513 (Nicaragua); FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 265 (Guayabo, Costa Rica).

Aganus lepidus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 187 (Babahoyo, western Ecuador).

Aganus bracatus HEINE and REICHENOW, Nom. Mus. Hein., Orn., 1890, p. 209 (Mexico).

Chrysotrogon caligatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 786.

Range: Southern Mexico to Panama, western Ecuador and northwestern Peru.[a]

13: Guatemala (Patulu 12, Zacapa 2, Mazatenango 1); Costa Rica (Boruca 2, Guayabo 5); Nicaragua (San Gerónimo) 2.

Chrysotrogon caligatus columbianus[b] *Chapman*. COLOMBIAN GARTERED TROGON.

Chrysotrogon caligatus columbianus CHAPMAN, Bull. Am. Mus. Nat. Hist. XXXIII, 1914, p. 607 (Opon, central Magdalena River, Colombia); *Id.* XXXVI, 1917, p. 317 (Puerto Valdivia; Honda; Opon; Puerto Berrio Colombia).

Range: Tropical region between the western and eastern Andes, Colombia (Cauca-Magdalena Valleys, etc.) northward to Santa Marta.

***Chrysotrogon violaceus** (*Gmelin*). SOUTHERN TROGON.

Trogon violaceus GMELIN, Syst. Nat., I, 1788, p. 404 (Surinam); CHUBB, Bds. Brit. Guiana, I, 1916, p. 434.

Trogon meridionalis SWAINSON, Anim. in Menag., pt. III, 1838, p. 332 ("Bahamas," errore); GOULD, Mon. Trogon., ed. 1, 1838, pl. 9 and text; *Id.*, ed. 2, 1875, pl. 17 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 467.

Trogon violaceus violaceus HELLMAYR, Nov. Zool., XIII, 1906, p. 42 (Trinidad).

Chrysotrogon violaceus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 785, in key.

Chrysotrogon violaceus violaceus BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 60 (Paramaribo, Surinam).

Range: Guiana, Trinidad, Venezuela and extreme northern Brazil (Rio Branco region).

4: British Guiana 2; Venezuela (Orope, Zulia) 1; Brazil (Serra Grande, Rio Branco) 1.

[a] I have not seen specimens from Ecuador or Peru or the Pacific coast region of Colombia.

[b] *Chrysotrogon caligatus columbianus* CHAPMAN: Similar to *C. caligatus caligatus* in vermiculation of wings and feathering of tarsus, but differs in having the head blue or purplish (as in *violaceus*); bill smaller.

Chrysotrogon ramonianus ramonianus (*Deville and Des Murs*). DEVILLE'S TROGON.

Trogon ramoniana DEVILLE and DES MURS, Rev. Zool., 1849, p. 331 (Sarayacu, eastern Ecuador).

Trogon ramonianus GOULD, Mon. Trogon., ed. 2, 1875, pl. 18 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 468; GOODFELLOW, Ibis, 1902, p. 212 (Coca, Ecuador).

Chrysotrogon ramonianus ramonianus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 786, in key.

Chrysotrogon ramonianus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 317 (Florencia, Colombia).

Trogon violaceus ramonianus HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Ecuador, Peru, and southern Colombia (Florencia).

Chrysotrogon ramonianus crissalis (*Cabanis and Heine*). BAHIA TROGON.

Aganus crissalis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 190 (Bahia, Brazil).

(?) *Microtrogon ramonianus* GOELDI, Alb. Aves Amazon, pt. III, 1905, pl. 28, fig. 4; (?) SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 207 (Pará; Benevides; Rio Guamá; Rio Tocantins; Rio Xingu; Rio Curuá; Rio Tapajoz; Rio Jamauchim; Bom Lugar on the Rio Purús, and Obidos, Brazil).[a]

Chrysotrogon ramonianus crissalis (?) RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 786, in key and footnote, crit.

Range: Brazil, from Bahia to Lower Amazon Valley and Pará?

Genus **CURUCUJUS** Bonaparte.

Curucujus Bonaparte, Atti Italiano, 1854, No. 8 (Consp. Voluc. Zygod., 1854. p. 14 (Type, fixed by Gray, 1855,—"*Trogon curucui* Linnæus," i.e., *T. melanurus* Swainson).

Curucujus melanurus melanurus (*Swainson*). BLACK-TAILED TROGON.

Trogon melanurus SWAINSON, Anim. in Menag., pt. III, 1838, p. 329 (Demerara, British Guiana); GOULD, Mon. Trogon., ed. 1, 1838, pl. 18 and text; *Id.*, ed. 2, 1875, pl. 29 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 472; HELLMAYR, Nov. Zool., XIII, 1906, p. 379 (Pará); VON IHERING, Aves do Brazil, 1907, p. 158 (Rio Jurua, etc.); CHUBB, Bds. Brit. Guiana, I, 1916, p. 430; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 209 (Pará; Rio Iriri; Cussary; Rio Purús; Marajo; Monte Alegre; Obidos; Rio Jamunda; Maranhão, Brazil).

Trogon melanurus melanurus HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

[a] Specimens from some of the localities given by Snethlage may represent different subspecies. Ridgway (*l. c.*, footnote) has already provisionally proposed the name *Chrysotrogon ramonianus goeldii* for a bird from Pará.

Curucujus melanurus melanurus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 743, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 317 (Florencia, Colombia); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 60 (Rijsdijkweg; Surinam).

Range: Guiana and northern Brazil to Colombia and Ecuador.

4: British Guiana.

***Curucujus melanurus macrourus** (*Gould*). LARGE-TAILED TROGON.

Trogon macroura GOULD, Mon. Trogon., ed. 1, 1838, pl. 17 and text ("Mexique," Caracas, Venezuela).[a]

Trogon macrurus GOULD, Mon. Trogon., ed. 2, 1875, pl. 30 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 474.

Trogon melanurus macrurus BANGS, Proc. N. E. Zool. Club, II, 1900, p. 19 (Panama).

Curucujus melanurus macrourus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 747; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 318; (Salaqui; Rio Atrato, Colombia).

Range: Northern Colombia and eastern Panama.

2: Panama.

***Curucujus massena massena** (*Gould*). MASSENA TROGON.

Trogon massena GOULD, Mon. Trogon., ed. 1, 1838, pl. 16 and text (Guatemala), GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 474; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 503; FERRY, Field Mus. Nat. Hist., Orn. Ser. I, 1910, p. 265 (Guayabo, Costa Rica).

Troctes hoffmanni CABANIS and HEINE, Mus. Hein., IV, 1863, p. 204, footnote (Costa Rica).

Curucujus massena RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 744; Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 257 (Panama Canal Zone).

Range: Southeastern Mexico (States of Vera Cruz, Oaxaca, etc.) southward through Guatemala, British Honduras, Honduras, Nicaragua and Costa Rica to eastern Panama; northwestern Colombia?

7: Mexico (Vera Cruz) 1; Guatemala (Los Amates) 2; Nicaragua (San Emilis) 1; Costa Rica (Guayabo 1, "Costa Rica" 2).

Curucujus massena australis *Chapman*.[b] SOUTHERN MASSENA TROGON.

Curucujus massena australis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 384 (Barbacoas, Colombia); *Id.*, XXXVI, 1917, p. 318 (Alto Bonito; Bagado; Barbacoas; La Frijola, Colombia).

Trogon massena HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1193 (Truando; Delta of the Atrato, western Colombia).

[a] I propose to substitute Rio Atrato, northern Colombia.

[b] *Curucujus massena australis* CHAPMAN: Similar to *C. m. massena*, but smaller; male with exposed upper surface of the inner rectrices bluish green (instead of bronze green), somewhat as in *C. melanurus;* female decidedly darker gray.

Range: Western Colombia (coast region east to the lower Cauca region).

***Curucujus clathratus** (*Salvin*). LATTICE-TAILED TROGON.

Trogon clathratus SALVIN, Proc. Zool. Soc. Lond., 1866, p. 75 (Santa Fé de Veragua, Panama); GOULD, Mon. Trogon., ed. 2, 1875, pl. 28 and text; GRANT, Cat. Bds. Brit. Mus., XVII, 1892, p. 476; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 504.

Curucujus clathratus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 749.

Range: Costa Rica and western Panama.

1: Panama.

Order COCCYGES.

Suborder CUCULI.

Family CUCULIDÆ. Cuckoos, Anis, etc.

Subfamily Cuculinæ

Genus CUCULUS Linn.

Cuculus Linnæus, Syst. Nat., ed. 10, I, 1758, p. 110 (Type *C. canorus* Linn.).

***Cuculus canorus telephonus** (*Heine*). KAMCHATKAN CUCKOO.

Cuculus telephonus HEINE, Journ. für Ornith., XI, 1863, p. 352 (Japan).
Cuculus canorus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 245, part.
Cuculus canorus telephonus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 7; HARTERT, Vögel paläarktischen Fauna, Heft VII, Bd. II, I, 1912, p. 948.

Range: Old World (northern Asia, etc.); accidental on St. Paul Island, Pribilof Group, Alaska.

1: China.

Genus COCCYZUS Vieill.

Coccyzus Vieillot, Analyse, 1816, p. 28 (Type *Coucou de la Caroline* Buffon = *Cuculus americanus* Linn.).

***Coccyzus americanus americanus** (*Linn.*). YELLOW-BILLED CUCKOO.

[*Cuculus*] *americanus* LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 111 (South Carolina).
Coccyzus americanus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 308; AUDUBON, Orn. Biog., I, 1831, p. 18, pl. 2; ALLEN, Bull. Am. Mus. Nat. Hist., 1900, p. 134 (Bonda, Colombia, Oct. 27–Nov. 21); LÖNNBERG, Ibis, 1903, p. 454 (Bolivia); CHUBB, Ibis, 1910, p. 271 (Paraguay).
Coccyzus americanus americanus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 12; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 319 (Colombia, March, April 10–13 and Oct. 2).

Range: Eastern North America; winters in Mexico, West Indies, Central America and northern South America; accidental in Greenland, England, France and Belgium.[a]

†45: North America (New York 1, Connecticut 2, Wisconsin 2, Illinois 14, Indiana 1, Florida 5, Louisiana 1, Mississippi 1); Mexico

[a] The numerous records for *Coccyzus americanus* in Bolivia, Argentina, Paraguay, and other parts of southern South America, probably refer to *C. a. julieni*.

(Tamaulipas 2); West Indies (Bahama Islands—Inagua 3, Watlings Island 1, San Domingo 10, Antigua 1, Aruba 2; South America (Colombia 1, Venezuela 1).

***Coccyzus americanus occidentalis** *Ridgway*. CALIFORNIA CUCKOO.

Coccyzus americanus occidentalis RIDGWAY, Man. N. Am. Bds., 1887, p. 273 (Santa Rita Mts., Arizona); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1916, p. 17.

Range: Western United States and British Colombia, south to Costa Rica in winter.

†14: North America (California 2, Arizona 4, Colorado 3, Texas 5, British Colombia 1).

Coccyzus americanus julieni (*Lawr.*). SOUTHERN YELLOW-BILLED CUCKOO.

Coccyzus julieni LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., VIII, 1864, p. 42 (Sombrero I., Lesser Antilles).

Coccyzus americanus julieni RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 19.

Range: Guiana to Bolivia, Paraguay and southern Brazil, South America; Sombrero 1, West Indies.

Coccyzus euleri *Cabanis*. EULER'S CUCKOO.

Coccyzus euleri CABANIS, Journ. für Ornith., I, 1873, p. 72 (Cantagallo, Rio de Janeiro, Brazil).

Coccyzus euleri STONE, Ibis, 1899, p. 476, crit; HELLMAYR, Nov. Zool., 1913, p. 252; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 20 (footnote).

Range: South America, from Guiana to southern Brazil and Argentina?[a]

Coccyzus minor minor (*Gmel.*). MANGROVE CUCKOO.

[*Cuculus*] *minor* GMELIN, Syst. Nat., I, Pt. 1, 1788, p. 411 (Cayenne).

Coccyzus minor SHELLEY, Cat. Bds. Brit. Mus., XIX, p. 304, part.

Coccyzus minor minor RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 21.

Coucou des Palétuviers DAUBENTON, Pl. Enl., pl. 813.

Range: Atlantic Coast of South America, Central America, and Mexico; from Tamaulipas, Mexico, to Lower Amazon Valley.

Coccyzus minor palloris *Ridgway*. PACIFIC MANGROVE CUCKOO.

Coccyzus minor palloris RIDGWAY, Proc. Biol. Soc. Wash., XXVIII, 1915, p. 105 (Pigres, Costa Rica); *Id.*, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 23.

[a] Argentina is included in the range of *C. euleri* by Brabourne and Chubb (Bds. S. Am., I, 1912, No. 1477), but Dabbene states he is unable to find a record of its occurrence there (*cf.* Bol. Soc. Physis, I, No. 6, 1914, p. 320).

Range: Pacific coast of Central America and Mexico; Tres Marias Islands.

***Coccyzus minor maynardi** (*Ridgway*). MAYNARD'S MANGROVE CUCKOO.

Coccyzus maynardi RIDGWAY, Man. N. A. Bds., 1887, p. 274 (Ten Thousand Islands, Florida).

Coccyzus minor maynardi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 25.

Range: Florida Keys and Bahama Islands; occasional in Cuba, Haiti (and Grand Cayman?).

†37: North America (Florida 1); Bahama Islands (Eleuthera 6, New Providence 6, Berry Island 2; Andros 3, Watlings Island 3, Caicos 3, Inagua 13).

***Coccyzus minor nesiotes** *Cabanis*. JAMAICAN MANGROVE CUCKOO.

[*Coccygus*] *nesiotes* CABANIS, Mus. Hein., IV, 1862, p. 78, footnote (Greater Antilles).[a]

Coccyzus minor nesiotes RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 26; WETMORE, Bull. U. S. Dept. Agricul., No. 326, 1916, p. 57 (Porto Rico; Culebra I.; Vieques I.).

Range: Jamaica, Cuba, Haiti and San Domingo to Porto Rica, Culebra, etc.; St. John's, Virgin Gorda and Tortola Islands; occasional in Bahamas, Florida Keys and Cayman Islands.

†51: West Indies (Haiti 7; San Domingo 30; Jamaica 5; St. Thomas 1; Porto Rico 1; Virgin Gorda 5; Tortola 1, and Montserrat 1).

***Coccyzus minor caymanensis** *subsp. nov.*[b] CAYMAN MANGROVE CUCKOO.

Range: Cayman Island, West Indies.

†28: Grand Cayman Island (including type specimen).

***Coccyzus minor rileyi** *Ridgway*. RILEY'S MANGROVE CUCKOO.

Coccyzus minor rileyi RIDGWAY, Proc. Biol. Soc. Wash., 1915, p. 105 (Barbuda, Lesser Antilles); *Id.*, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 29.

[a] I suggest Island of Jamaica for the type locality.

[b] Type from Grand Cayman Island, West Indies. Adult female, No. 41417, Field Museum of Natural History; collected by D. J. Sweeting, March 22, 1892. Intermediate between *C. m. nesiotes* Cabanis and *C. m. maynardi* (RIDGWAY), averaging larger and more tinged with rufous on under parts than *maynardi* and averaging paler and smaller than *nesiotes* from San Domingo taken at the same season. (28 specimens from Grand Cayman taken in March, April, May, June, July and August.)

NOTE.— Same specimens are practically indistinguishable from *nesiotes* and the two approach very closely to *maynardi*, but the great majority, while but slightly different from *nesiotes*, appear to represent a recognizable local race.

Range: Islands of Barbuda and Antigua, Lesser Antilles; Montserrat (?); Swan Island, Caribbean Sea.

†10: West Indies (Antigua Island).

***Coccyzus minor vincentis** *Clark.* ST. VINCENT MANGROVE CUCKOO.

Coccyzus minor vincentis CLARK, Proc. Boston Soc. Nat. Hist., XXXII, 1905, p. 264 (Peter's Hope, St. Vincent, Lesser Antilles); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 30.

Range: Islands of St. Vincent and Sta. Lucia, West Indies.

†11: West Indies (Sta. Lucia 7 and St. Vincent 4).

***Coccyzus minor dominicæ** *Shelley.* SHELLEY'S MANGROVE CUCKOO.

Coccyzus dominicæ SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 306 (Dominica, Lesser Antilles).

Coccyzus minor dominicæ CORY, Cat. West Ind. Bds., 1892, p. 102; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 31.

Range: Islands of Guadeloupe, Dominica and Martinique, Lesser Antilles.

6: West Indies (Guadeloupe 3, Martinique 2 and Dominica 1).

***Coccyzus minor grenadensis** *Bangs.* GRENADA MANGROVE CUCKOO.

Coccyzus minor grenadensis BANGS, Proc. Biol. Soc. Wash., XX, 1907, p. 53 (Union Island, Grenadines); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 33.

Range: Islands of Grenada and Grenadines, Lesser Antilles.

6: West Indies (Grenada).

***Coccyzus minor abbotti** (*Stone*). ABBOTT'S MANGROVE CUCKOO.

Coccyzus abbotti STONE, Proc. Acad. Nat. Sci. Phila., 1899, p. 301 (St. Andrews Island, Caribbean Sea).

Coccyzus minor abbotti RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 34.

Range: Islands of St. Andrews and New Providence, Caribbean Sea, Aruba, Dutch West Indies (?).

†11: Caribbean Sea (Old Providence Island 9, St. Andrews Island 2); Dutch West Indies? (Aruba Island, off Venezuela 1).[a]

Coccyzus ferrugineus *Gould.* COCOS ISLAND CUCKOO.

Coccyzus ferrugineus GOULD, Proc. Zool. Soc. Lond., 1843, p. 105 (Cocos Island); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 34.

Range: Cocos Island, Pacific Ocean, off Costa Rica, Central America.

[a] The single specimen from Aruba Island is somewhat smaller and has much ess yellow on the lower mandible. It may prove subspecifically separable.

***Coccyzus melacoryphus** *Vieillot.* AZARA'S CUCKOO.

Coccyzus melacoryphus VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 271 (Paraguay); BERLEPSCH and HARTERT, Nov. Zool., IX., 1902, p. 97 (Orinoco Region, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 282 (Cayenne); CHUBB, Ibis, 1910, p. 271 (Paraguay); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 211 (Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 437; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 35; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 319 (Colombia); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 49 (Paramaribo, Surinam).

Coccyzus melanocoryphus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 307; GOELDI, Alb. Aves Amazon, pt. 3, 1905–6, pl. 25, fig. 3; GOODFELLOW, Ibis, 1902, p. 215 (Coca, Ecuador).

Range: Greater portion of South America from Colombia to the Guianas and northern Brazil, south to Paraguay, Peru and Argentina; Galapagos Islands.

†16: Venezuela (Merida 4); Brazil (Bahia and Ceará 11); Peru (Moyobamba 1).

***Coccyzus erythrophthalma** *Wilson.* BLACK-BILLED CUCKOO.

Cuculus erythrophthalma WILSON, Am. Orn., IV, 1811, p. 16, pl. 28, fig. 2 (Pennsylvania or Georgia, U. S. A.).

Coccyzus erythrophthalmus CORY, Bds. West Indies, 1889, p. 161; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 311; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 38.

Range: Temperate eastern North America, Manitoba, Ontario, etc., south nearly to the Gulf and west to Colorado, Kansas, etc.; in winter south through Mexico, Central America and South America to Peru; also Greater Antilles.

†28: North America (Massachusetts 1, New York 4, Connecticut 5, Georgia 1, Illinois 9 and Wisconsin 7); South America (Colombia 1).

***Coccyzus lansbergi** *Bonap.* LANSBERG'S CUCKOO.

Coccyzus lansbergi BONAPARTE, Consp. Av., I, 1850, p. 112 (Bogotá, Colombia); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 303; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 41.

Range: Colombia and Panama; Venezuela and Ecuador.

1: "Colombia."

Genus MICROCOCCYX Ridgway.

Micrococcyx Ridgway, Proc. Biol. Soc. Wash., XXV, 1912, p. 99 (Type *Coccyzus pumilus* Strickland).

***Micrococcyx pumilus** (*Strick.*). DWARF CUCKOO.

Coccyzus pumilus STRICKLAND, Cont. Orn., 1852, p. 28, pl. 82 ("Trinidad"); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 313; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 97 (Quiribana de Caicara, Venezuela).

Micrococcyx pumilus CHERRIE, Mus. Brooklyn Inst. Art. & Sci., Sci. Bull., II, 1916, p. 312 (Maripa; Caura R., and Quiribana de Caicara, Venezuela).

Range: Venezuela and Colombia; Trinidad?

3: "Venezuela."

Micrococcyx cinereus (*Vieill.*). ASH-COLORED CUCKOO.

Coccyzus cinereus VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 272 (Paraguay); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 312; SCLATER and HUDSON, Argentine Orn., II, 1889, p. 38, pl. 13.

Range: Paraguay, southern Brazil, Argentina, northern Chile (?).

Genus COCCYCUA Lesson.

Coccycua Lesson, Traite d'Orn., 1831, p. 142 (Type *Cuculus monachus* Cuvier = *C. rutilus* Illiger).

***Coccycua rutila rutila** (*Illiger*). LITTLE CUCKOO.

Cuculus rutilus ILLIGER, Abh. Akad. Berlin, 1812, p. 224 (Cayenne).

Piaya minuta SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 378 (part); GOELDI, Alb. Aves Amazon, pt. 3, 1905–6, pl. 25, fig. 2.

Piaya rutila STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 496, part (Colombia, Venezuela and Cayenne); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXII, 1906, p. 600; *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Piaya rutila rutila CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 393 (key to races); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 332 (Villavicencio, Colombia).

C[occycua] rutila rutila RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 43, footnote.

Piaya rutila orinocensis CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 393 (Sacupana, Orinoco Delta, Venezuela).[a]

Coccycua rutila rutila BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 49 (Paramaribo and Rijsdijkweg, Surinam).

Range: From eastern Colombia through Venezuela and Trinidad to Cayenne and northern Brazil; Peru (Moyobamba)?

7: British Guiana 2, and Brazil (Rio Branco) 1; Venezuela (Orope) 3; "Colombia" 1; Peru (Moyobamba) 1?[b]

Coccycua rutila gracilis (*Heine*). WESTERN LITTLE CUCKOO.

Coccyzusa gracilis HEINE, Journ. für Ornith., XI, 1863, p. 356 (Esmeraldas, western Ecuador).

P[iaya] rutila gracilis CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 394, in key.

C. r. gracilis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 44, in text.

[a] I can find no *constant* characters by which birds from Venezuela can be distinguished from those from Guiana.

[b] An immature specimen which I refer provisionally to this form.

Piaya rutila gracilis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 322 (Cali; Rio Frio; Malena, Colombia).

Range: Western Ecuador and western Colombia.

Coccycua rutila panamensis (*Todd*). PANAMA LITTLE CUCKOO.

Piaya rutila panamensis TODD, Ann. Carnegie, Mus. VIII, 1912, p. 212 (Lion Hill, Panama).

Coccycua rutila panamensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 43 (cut, pl. III); Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 257 (Gatun, Panama Canal Zone).

Range: Eastern Panama (Colon, Lion Hill, Canal Zone, Darien, etc.).

Coccycua rutila chaparensis[a] (*Cherrie*). BOLIVIAN LITTLE CUCKOO.

Piaya rutila chaparensis CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 392 (Todos Santos, Rio Chapare, Bolivia).

Range: Bolivia.

Genus **PIAYA**[b] Lesson.

Piaya Lesson, Traite d'Orn., 1831, p. 139 (Type *Cuculus cayanus* Linnæus).

***Piaya cayana cayana** (*Linnæus*). SQUIRREL CUCKOO.

Cuculus cayanus LINNÆUS, Syst. Nat., ed. 12, I, 1776, p. 170 (Cayenne).

Piaya cayana LESSON, Traite d'Orn., 1831, p. 140; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 373, part; CHUBB, Bds. Brit. Guiana, I, 1916, p. 439.

Pyrrhococcyx guianensis CABANIS and HEINE, Mus. Hein., IV, 1862, p. 85.

Piaya cayana guianensis BERLEPSCH, Nov. Zool., IX, 1902, p. 97 (Orinoco Region).

Piaya cayana cayana STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 497; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 309; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 47, in key; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 49 (Paramaribo, Lelydorp and Altonaweg, Surinam).

Range: Guiana, eastern Venezuela and adjacent part of extreme northern Brazil (Rio Branco region, etc.).

10: British Guiana (Georgetown) 3; Brazil (Boa Vista, Rio Branco 3; Base of Serra da Lua, near Boa Vista 4).

[a] *Coccycua rutila chaparensis* (CHERRIE): "Similar to *P. r. panamensis* Todd, but darker above (nearly a liver brown) and below. The hazel or rufous brown color (as in *panamensis*) confined to the chin and throat not extending over the breast" (Cherrie, *l. c.*).

[b] For revision of the genus, keys to species, etc., see Allen, Bull. Am. Mus. Nat. Hist., 1893, p. 136; HELLMAYR, Nov. Zool., 1906, p. 44; *Id.*, 1907, p. 35; von Ihering, Fauna Bras. Aves, 1907, p. 160; STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 492; DABBENE, Orn. Argentine, Mus. Nat. Buenos Ayres, 1910, p. 425; CORY, Field Mus. Nat. Hist. Orn., Ser., I, 1915, p. 307; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 45.

Piaya cayana insulana[a] *Hellmayr*. TRINIDAD SQUIRREL CUCKOO.

Piaya cayana insulana HELLMAYR, Nov. Zool., XIII, 1906, p. 43 (Trinidad); STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 498; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 309.

Range: Island of Trinidad.

***Piaya cayana cearæ** *Cory*.[b] CEARÁ SQUIRREL CUCKOO.

Piaya cayana cearæ CORY, Field Mus. Nat. Hist., Orn. Ser., I, p. 304 (Jua, near Iguatú, Ceará, Brazil); *Id.*, p. 308 (key to species).

Range: Northeastern Brazil (Province of Ceará).

5: Brazil (Jua and Quixada, Province of Ceará).

***Paiya cayana pallescens** (*Cabanis and Heine*[c]). PALE SQUIRREL CUCKOO.

Pyrrhococcyx pallescens CABANIS and HEINE, Mus. Hein., IV, 1862, p. 86 ("North Brazil" = Province of Bahia).

Piaya cayana pallescens STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 500; CORY Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 308.

(?)*Piaya cayana cabanisi* ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 136 (Chapada, Matto Grosso, Brazil).

Range: Central and eastern Brazil north about to Pernambuco.

4: Brazil (Santo Amaro; Andarahy, in Prov. of Bahia).

***Piaya cayana venezuelensis**[d] *Cory*. VENEZUELAN SQUIRREL CUCKOO.

[a] *Piaya cayana insulana* HELLMAYR: Under parts similar to *P. c. cayana*, but differs in brighter coloration of the upper parts and in having the rufous coloration of the second and third tail feather confined to the outer web. The size is somewhat smaller.

[b] *Piaya cayana cearæ* CORY: Belongs in the group with more or less of under surface of rectrices distinctly rufous or rusty (*columbiana*, *venezuelensis*, etc.). Back approaching hazel brown, but coloration duller and less rufescent than in *P. c. columbiana;* under parts much paler. Nearest to *P. c. pallescens;* throat as in *pallescens;* middle of abdomen ashy white; thighs, lower abdomen, and under tail coverts between pale neutral gray and pallid neutral gray, much paler than in any other known form. A specimen from Pernambuco in the U. S. National Museum (No. 39704) appears to be intermediate between this form and *P. c. pallescens*, but approaches nearer to *pallescens* from Bahia; compared with *P. c. cearæ* from Jua, the Pernambuco bird has the upper parts less rufescent; the upper surface of the rectrices darker and more purplish, and the under surface of the rectrices much less rufous, but the coloration of the lower belly, under tail coverts, and pale flanks approach nearer to *cearæ*.

[c] *Piaya cayana pallescens* (CABANIS and HEINE): Back approaching hazel brown throat approaching vinaceous fawn, but with a faint tinge of ochraceous (paler and quite different from *P. c. cayana*); lower abdomen neutral gray shading into slightly darker neutral gray on under tail coverts; under surfaces of rectrices only tinged with rufous and not strongly rufous as in *P. c. cearæ*. Specimens from Bahia apparently do not differ in coloration from those from Chapada, Matto Grosso, but they average larger. If they prove separable, Allen's name *cabanisi* will stand for the Matto Grosso form.

[d] *Piaya cayana venezuelensis* CORY: This form is apparently restricted to the low heavily forested region south of Lake Maracaibo, and is readily distinguished from *P. c. columbiana* by its chestnut bay upper parts and generally darker coloration and from *P. c. cayana* and *P. c. mesura* by the rusty brown marking on the under

Piaya cayana venezuelensis CORY, Field Mus. Nat. Hist., Orn. Ser. I, 1913, p. 284 (Orope, Zulia, Venezuela).

Range: Low forested region in northwestern Venezuela.

4: Venezuela (Orope and Catatumbo, Zulia), including the type.

***Piaya cayana columbiana** (*Cabanis*). COLOMBIAN SQUIRREL CUCKOO.

Pyrrhococcyx columbianus CABANIS, Journ. für Ornith., 1862, p. 170 (Cartagena, Colombia).

Piaya cayana columbiana STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 498; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 308; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 319 (Puerto Berro; Chicoral; Alto de la Paz; Subica, Colombia).

Piaya columbiana RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 47, in key.

Range: Northern Colombia (in the interior, from central Andes to western slope of eastern Andes, northward to the coast) and east in coast region of northwestern Venezuela.

5: Colombia 1; Venezuela (Maracay 2, Rio Aurare 2).

Piaya cayana mesura[a] (*Cabanis*). BOGOTÁ SQUIRREL CUCKOO.

P[yrrhococcyx] mesurus CABANIS, Mus. Hein., IV, 1862, p. 83 (Bogotá).

Piaya cayana mesura CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 321 (La Palma; Andalucia; Quetame; Buena Vista; Barrigon, Colombia).

Range: Andes of eastern Colombia (eastern slope of eastern Andes).[b]

***Piaya cayana nigricrissa** (*Cabanis*).[c] BLACK-VENTED SQUIRREL CUCKOO.

Pyrrhococcyx nigricrissa CABANIS, Journ. für Ornith., 1862, p. 169 (Babahoyo or Esmeraldas, western Ecuador, ex. Sclater); *Id.*, Mus. Hein., IV, 1862, p. 85.

Piaya nigricrissa SCLATER (*Nom. nud.*) Proc. Zool. Soc. Lond., 1860, p. 285 (Babahoyo, western Ecuador).

surface of the rectrices and other characters. Reference to the difference in coloration of the under surface of the rectrices was inadvertently omitted in my original description of *venezuelensis* when comparing it with *P. c. cayana*.

[a] *Piaya cayana mesura* (CABANIS): General coloration much nearer *P. c. cayana* than to any other form and may be distinguished at once from *P. c. columbiana* and *P. c. venezuelensis* by the much more blackish coloration and absence of distinct rufous marking on the under surface of all (except the central pair) of the tail feathers. *P. c. mesura* has the under surface of tail somewhat darker than in *P. c. cayana* and the lower abdomen and under tail coverts are much more blackish.

[b] According to Chapman (*l. c.*) this form occurs on "both eastern and western slopes of the Andes at the head of the Magdalena Valley."

[c] *Piaya cayana nigricrissa* (CABANIS): Differs from *C. p. mesura* in having upper parts darker and the ventral region and crissum distinctly black (not blackish gray) and from *P. c. columbiana* by its much darker general coloration and absence of the conspicuous bright rufous marking on the greater portion of the under surface of *all* of the tail feathers; black crissum, etc.

Piaya cayana caucæ STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 499 (Rio Cauca, Colombia).[a]

Piaya cayana nigricrissa CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 310, part; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 320 (Alto Bonita; San José; Barbacoas; Buena Vista; Ricaurte; Puerto Valdivia; San Antonio; Cerro Munchique; Guenque; Rio Frio; Miraflores; Salento; Sta. Elena; Andes west of Honda, Colombia).

Range: Western Ecuador and western Colombia (east to the central Andes[b]) and northern Peru.

3: "Western Colombia" 2; Peru (Yurimaguas 1).

***Piaya cayana boliviana** *Stone*.[c] BOLIVIAN SQUIRREL CUCKOO.

Piaya cayana boliviana STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 501 (Yungas, Bolivia).

Range: Bolivia and southeastern Peru (Inca Mine and Huiro, Urubamba R.).

2: Bolivia (Porto Velho 1); Peru (Huiro, Urubamba R. 1).

Piaya cayana obscura *Snethlage*.[d] SNETHLAGE'S SQUIRREL CUCKOO.

Piaya cayana obscura SNETHLAGE, Journ. für Ornith., 1908, p. 21 (Bom Lugar, Rio Verde, Upper Rio Purús, western Brazil); *Id.*, Boll. Mus. Goeldi, VIII, 1914, p. 212 (Bom Lugar; Monte Verde, Rio Purus, Brazil); HELLMAYR, Nov. Zool., XVII, 1910, p. 401 (Calama, Rio Madeira, Brazil).

Range: Upper Amazon region (Rio Purús) western Brazil.

***Piaya cayana macroura** (*Gambel*). LARGE-TAILED SQUIRREL CUCKOO.

Piaya macroura GAMBEL, Journ. Acad. Nat. Sci. Phila., 1849, p. 215 (Surinam= Paraguay; Surinam, loc. errore, See Cabanis and Heine, Mus. Hein., IV, 1867, p. 87; CHUBB, Ibis, 1910, p. 272 (Paraguay); DABBENE, Bol. So c. Physis. I, No. 6, 1914, p. 320 (Tucuman Salta, etc., Argentina).

Piaya cayana macroura STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 501; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 310.

P[*iaya*] *c.* var. *guarania* VON IHERING, Rev. Mus. Paulista, 1904, p. 448 (Ourino, Estado de Paraná, southern Brazil).

[a] *Cf.* CHAPMAN, *l. c.*

[b] Intergrading with *C. p. columbiana* in central Andes region.

[c] *Piaya cayana boliviana* STONE: "Above walnut brown, wings and rump tinged with chestnut, tail tinged with bay, both glossed with wine purple; flanks dark gray, crissum slightly darker; under side of rectrices dull black with tips white; no trace of a subterminal band" (Stone, *l. c.*). The coloration of the crissum and other characters will readily distinguish this race from *P. c. nigricrissa* (CABANIS) and it is quite different from *P. c. pallescens* (CABANIS and HEINE) of Brazil. I have not compared it with specimens of *P. c. obscura* Snethlage, which is autoptically unknown to me.

[d] *Piaya cayana obscura* SNETHLAGE: Described as differing from *P. c. nigricrissa* in its gray (instead of black) tibia, and dusky gray (instead of black) crissum, and the under surface of the tail feathers entirely black. From *P. c. cayana* it differs in the browner (less fox-red) upper parts and the dusky (not ashy gray) under tail coverts. No specimens seen by me.

(?) *Piaya circe* BONAPARTE, Consp. Av., I, 1850, p. 110 ("Colombia"; loc. errore =Paraguay).[a]

Range: Paraguay, southern Brazil (at least north to Minas Geraes) and northern Argentina.

2: Brazil[b] (Lagoa Santa, Minas Geraes 1); Argentina[c] 1.

***Piaya cayana thermophila** (*Sclater*). CENTRAL AMERICAN SQUIRREL CUCKOO.

Piaya thermophila SCLATER, Proc. Zool. Soc. Lond., 1859, p. 368 (Jalapa, Vera Cruz, Mexico).

Piaya cayana thermophila RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 51; STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 257 (Toro Point, Panama Canal Zone).

Piaya cayana mehleri NUTTING, Proc. U. S. Nat. Mus., V, 1882, p. 401; STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 499; CARRIKER, Ann. Carnegie Mus. VI, 1910, p. 565 (Costa Rica).

Range: Panama to southeastern Mexico.

†30: Mexico and Central America (Yucatan 2; British Honduras 1; Tolbox Island 1; Mugeres Island 1; Tampico 2; San Luis Potosi 1; Costa Rica 12; Nicaragua 6; Guatemala 6).

***Piaya mexicana** (*Swainson*)[d]. MEXICAN SQUIRREL CUCKOO.

Cuculus mexicana SWAINSON, Philos. Mag. N. H., I, 1827, p. 440 (Temascaltepec, Mexico).

Piaya mexicana SCLATER, Proc. Zool. Soc. Lond., 1859, p. 388 (Oaxaca), crit; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 531; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 51.

Piaya cayana mexicana STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 498.

Range: Southwestern and western Mexico.

7: Mexico (Jalisco and Colima).

***Piaya melanogaster melanogaster** (*Vieill.*). BLACK-BELLIED CUCKOO.

Cuculus melanogaster VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII. 1817, p. 236 (Java, errore! =Cayenne[e]).

[a] Cf. Cabanis and Heine, Mus. Hein., IV, 1862, p. 87.

[b] Specimens from Paraguay, northern Argentina, and extreme southern Brazil, are apparently larger and have a longer tail than birds from farther north. Two specimens from Paraguay measure: wing 170, tail 364; and wing 166, tail 335 mm. An adult male from Lagoa Santa, Minas Geraes measures: wing, 148, tail 292 mm. The coloration, however, is apparently the same, and the differences may be individual.

[c] The single specimen from Argentina is brighter above and has the under surface of the rectrices decidedly tinged with rusty. These difference may be individual or may represent regional characters of subspecific value.

[d] Ridgway considers this form to be worthy of specific rank (*l. c.*, footnote, p. 46).

[e] Cayenne, substituted by Hellmayr (Abh. K. Bayer. Akad. Wiss., Munchen, XXII, 1906, p. 600).

Piaya melanogastra STONE, Proc. Acad. Nat. Sci. Phila., 1908, p. 496; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 377 (part).

Piaya melanogaster melanogaster CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 307.

Macropus caixana SPIX, Av. Bras., I, 1824, p. 54 (part ♀) pl. XLIII, fig. 2.

Range: Guiana, northern Brazil and eastern Ecuador.

3: British Guiana.

***Piaya melanogaster ochracea**[a] *Cory*. PERUVIAN BLACK-BELLIED CUCKOO.

Piaya melanogaster ochracea CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 304 (Yurimaguas, Yane, Yaka, Peru).

Range: Peru.

1: Peru (Yurimaguas, the type).

Genus SAUROTHERA Vieillot.

Saurothera Vieillot, Analyse, 1816, p. 28 (Type *Coucou a longbec* Buffon = *Cuculus vetula* Linn.).

***Saurothera bahamensis bahamensis** *Bryant*. BAHAMAN LIZARD CUCKOO.

Saurothera bahamensis BRYANT, Proc. Boston Soc. Nat. Hist., IX, 1864, p. 280 (New Providence, Bahama Islands); CORY, Bds. Bahama Islands, 1880, p. 116 (col. plate); *Id.*, Bds. West Indies, 1889, p. 159; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 371; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 58.

Range: New Providence and Eleuthera Islands, Bahama.

7: Bahama Islands (New Providence 5; Eleuthera 2).

***Saurothera bahamensis andria**[b] (*Miller*). ANDROS ISLAND LIZARD CUCKOO.

Saurothera andria MILLER, Auk., 1894, p. 164 (Fresh Creek, Andros Island, Bahamas).

Saurothera bahamensis andria TODD, Ann. Carnegie Mus., 1911, p. 419; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 60.

Range: Andros Island, Bahamas.

3: Bahamas (Andros Island).

[a] *Piaya melanogaster ochracea* CORY: "Similar to *P. m. melanogaster*, but differs in having the bill smaller and general coloration somewhat paler; crown *paler* and more ashy gray; upper parts, throat and breast more tinged with ochraceous rufous." Wing, 131; tail, 216; tarsus, 37; bill (culmen), 24; depth of bill, 12 mm.

[b] While averaging slightly larger, birds from Andros Island are very close to *S. bahamensis bahamensis* and may prove inseparable. In specimens prepared by Maynard the color has been more or less changed largely due to the use of some preservative (probably alum) instead of arsenic.

***Saurothera merlini merlini** *D'Orbigny*. CUBAN LIZARD CUCKOO.

Saurothera merlini D'ORBIGNY, in La Sagra's Hist. Nat. Cuba, Ois., 1839, p. 152, pl. 25 (Cuba); CORY, Auk, 1886, p. 363; *Id.*, Bds. West Indies, 1889, p. 158, SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 370.

Saurothera merlini merlini RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 60.

Range: Island of Cuba.

6: Cuba.

Saurothera merlini decolor *Bangs and Zappey*. ISLE OF PINES CUCKOO.

Saurothera merlini decolor BANGS and ZAPPEY, Am. Nat., XXXIX, April, 1905, p. 199 (La Vega, Isle of Pines, Cuba); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 61.

Range: Isle of Pines, Cuba.

***Saurothera vieilloti** *Bonap.* PORTO RICAN LIZARD CUCKOO.

Saurothera vieilloti BONAPARTE, Consp. Av., I, 1850, p. 97 (Porto Rica[a]); GUNDLACH, Journ. für Ornith., 1874, p. 312; CORY, Auk, 1886, p. 363; *Id.*, Bds. West Indies, 1889, p. 158; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 371; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 62 (cut, pl. VI, fig. 1).

Range: Porto Rico, Vieques Island, and St. Thomas, West Indies.

8: Porto Rico.

***Saurothera vetula** *Linn.* JAMAICAN LIZARD CUCKOO.

[*Cuculus*] *vetula* LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 111 (Jamaica).

Saurothera vetula VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXII, 1819, p. 348 (part); GOSSE, Illustr. Bds. Jamaica, 1849, pl. 74; CORY, Auk, 1886, p. 362; *Id.*, Bds. West Indies, 1889, p. 157; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 370; SCOTT, Auk, 1892, p. 273; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 63.

Range: Island of Jamaica, West Indies.

3: Jamaica.

***Saurothera dominicensis** *Lafresnaye*. HAITIAN LIZARD CUCKOO.

Saurothera dominicensis LAFRESNAYE, Rev. Zool., X, 1847, p. 355 (Santo Domingo); CORY, Bull. Nutt. Orn. Club, VI, 1881, p. 154; *Id.*, Bds. Haiti and San Domingo, 1885, p. 98 (coll. pl.; head, fig. 5); *Id.*, Bds. West Indies, 1889, p. 154; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 369; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 64.

Range: Haiti and San Domingo, Island of Haiti.

†120: Haiti (Le Coup, Aux Cays, Jacmel) 9; San Domingo (Catare, Maniel, Honduras, San Domingo City, Puerto Plata, Samana, La Vega and San Cristobal) 111.

[a] Based on *S. vetula* (not *Cuculus vetula* Linn.) Vieillot, Nouv. Dict. d'Hist. Nat., 1819, p. 348, part (Porto Rico) and Lafresnaye, Rev. Zool., 1847, p. 357.

Genus **HYETORNIS** Sclater.

Hyetornis Sclater, Cat. Am. Bds., 1862, p. 321 (Type *Cuculus pluvialis* Gmelin).

***Hyetornis pluvialis** (*Gmel.*). JAMAICAN HYETORNIS.

Cuculus pluvialis GMELIN, Syst. Nat., I, pt. I, 1788, p. 411 (Jamaica).
Piaya pluvialis GOSSE, Illustr. Bds. Jamaica, 1849, pl. 74.
Hyetornis pluvialis CORY, Auk, 1886, p. 336; *Id.*, Bds. West Indies, 1889, p. 161; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 372; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 55.

Range: Island of Jamaica, West Indies.

7: Jamaica.

***Hyetornis rufigularis** (*Wurtt.*). HAITIAN HYETORNIS.

Coccyzus rufigularis WURTTEMBURG, Naumannia, 1852, Heft. II (Santo Domingo).
Hyteornis fieldi CORY, Auk, XII, 1895, p. 278 (Maniel, San Domingo).
Hyteornis rufigularis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 56.

Range: San Domingo, Island of Haiti (eastern part of the Island).

5: San Domingo (Maniel and Honduras), including the type of H. *fieldi* from Maniel.

Genus **NEOMORPHUS** Gloger.

Neomorphus Gloger, in Froriep's Notizen, XVI, 1827, p. 278 (Type *Coua geoffroyi* Temm.).

Neomorphus geoffroyi (*Temm.*). GEOFFROY'S GROUND CUCKOO.

Coua geoffroyi TEMMINCK, Pl. Col., III, pl. 7, 1824 (Brazil).
Neomorphus geoffroyi SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 416; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 213; HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Range: Brazil.

***Neomorphus salvini** *Sclater*. SALVIN'S GROUND CUCKOO.

Neomorphus salvini SCLATER, Proc. Zool. Soc. Lond., 1866, p. 60, pl. 5 (Veragua, Panama); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 84 (cut, pl. IX); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 323 (Alto Bonito; Baredo Mts., Colombia).

Range: Nicaragua and Costa Rica to Colombia and Ecuador.

1: Nicaragua.

Neomorphus pucherani (*Deville*). CASTELNAU'S GROUND CUCKOO.

Cultrides pucherani DEVILLE, Rev. et. Mag. Zool. 1851, p. 211 ("l'ucuyale," Peru).

Neomorphus pucherani SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 417. SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 214.

Range: Peru.

***Neomorphus rufipennis** (*Gray*). RUFOUS-WINGED GROUND CUCKOO.

Cultrides rufipennis GRAY, Proc. Zool. Soc. Lond., 1849, p. 63, pl. 10 (Guiana).
Neomorphus rufipennis SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 418; CHUBB, Bds. Brit. Guiana, I, 1916, p. 443, pl. IX.

Range: British Guiana.

2: British Guiana.

Neomorphus nigrogularis[a] *Chapman.* CHAPMAN'S GROUND CUCKOO.

Neomorphus nigrogrularis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 194 (Mt. Duida, southwestern Venezuela, alt. 700 ft.).

Range: Region of Mt. Duida, Venezuela.

Neomorphus radiolosus *Sclater and Salvin.* BANDED GROUND CUCKOO.

Neomorphus radiolosus SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1878, p. 439 (Intaj, Ecuador); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 418; HARTERT, Nov. Zool., X, 1898, p. 499 (Paramba).

Range: Ecuador.

Genus GEOCOCCYX Wagler.

Geococcyx Wagler, Isis, 1831, p. 524 (Type *G. variegata* Wagler—*Saurothera californiana* Lesson).

***Geococcyx californianus** *Lesson.* ROAD RUNNER.

Saurothera californiana LESSON, Compl. Buffon, VI, 1829, p. 420 (California).
Geococcyx mexicanus (not *Phasianus mexicanus* Gmel.) CASSIN, Ill. Bds. Calif. Texas, etc., 1855, p. 213, pl. 36; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 419.
Geococcyx californianus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 75 (cut, pl. II, fig. 2).

Range: Southwestern United States from middle California, Utah and Colorado, south to states of Puebla and Vera Cruz, Mexico.

9: Texas 3, Arizona 3, New Mexico 1; Mexico (Sonora, N. Leon) 2.

***Geococcyx affinis** *Hartlaub.* LESSER ROAD RUNNER.

Geococcyx affinis HARTLAUB, Rev. Zool., VII, 1844, p. 215 (Guatemala); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 421; RIDGWAY, Bull. U. S. Nat. Mus., VII, 1916, p. 80.

[a] *Neomorphus nigrogularis* CHAPMAN: Nearest to *N. rufipennis* (Gray) but smaller, the throat blackish, the lower breast, belly and flanks much darker; tail and wings greener.

Range: Southern Mexico from states of Sinaloa, Yucatan and Vera Cruz to Nicaragua.

8: Mexico (Oaxaca, Jalisco) 2; Yucatan 4; Guatemala 2.

Genus **MOROCOCCYX** Sclater.

Morococcyx Sclater, Cat. Am. Bds., 1862, p. 322 (Type *Coccyzus erythropyga* Lesson).

***Morococcyx erythropyga erythropyga** (*Lesson*). RUFOUS-RUMPED CUCKOO.

Coccyzus erythropyga LESSON, Rev. Zool., V, 1842, p. 210 ("San Carlos, Centre Amerique").

Morococcyx erythropygus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 422 (part).

Morococcyx erythropygus erythropygus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 71 (cut, pl. VIII).

Range: Costa Rica to Guatemala.

11: Guatemala 3; Nicaragua 7, and Costa Rica 1.

Morococcyx erythropyga mexicanus *Ridgway*. MEXICAN RUFOUS-RUMPED CUCKOO.

Morococcyx erythropygus mexicanus RIDGWAY, Proc. Biol. Soc. Wash., XXVIII, 1915, p. 105 (Juchitan, Oaxaca, southwestern Mexico); *Id.*, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 73 (syn., diag., range, etc.).

Range: Southwestern and western Mexico.

Genus **TAPERA** Thunburg.

Tapera Thunburg, Götheborg k. Vet. och Vitterhets, Samhallets Nya Handl., III, 1819, p. 1[a] (Type *Tapera brasiliensis* Thunburg = *Cuculus nævius* Linn.).

Diplopterus Boie, Isis, 1826, p. 977 (Type *Cuculus nævius* Linn.).

***Tapera nævia nævia** (*Linnæus*). STRIPED CUCKOO.

Cuculus nævius LINNÆUS, Syst. Nat., ed. 12, I, 1766, p. 170 (Cayenne).

Diplopterus nævius SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 423, part; TACZANOWSKI, Orn. Pérou, III, 1886, p. 184 (Peru).

Tapera nævia BERLEPSCH, Nov. Zool., XV, 1908, p. 283 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 214 (Pará; Mexiana, etc., northeastern Brazil); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 323 (many localities in Colombia).

Tapera nævia nævia RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 67, part (synonomy in footnote); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 50 (Paramaribo and Javaweg, Surinam).

Range: South America, from Colombia, Venezuela, the Guianas,

[a] See Lönnberg, Ibis, 1903 p. 239.

and northern Brazil, southward to Peru, Bolivia and south-central Brazil.

†20: Dutch Guiana 2; British Guiana 1; Brazil (Amazonia) 1; Colombia 3; Venezuela 11; Peru 2.

***Tapera nævia excellens** (*Sclater*). NORTHERN STRIPED CUCKOO.

Diplopterus excellens SCLATER, Proc. Zool. Soc. Lond., 1857 (Jan. 12, 1858) p. 229 (southern Mexico).

Diplopterus nævius SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 540, part.

Tapera nævius excellens RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 67 (cut, pl. VII).

Tapera nævia excellens STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 258 (Gatun, Panama Canal Zone).

Range: Southern Mexico to Panama.

6: Nicaragua 1; Mexico 1; Guatemala 1; Costa Rica 1, and Panama 2.

Tapera nævia chochi (*Vieillot*).[a] SOUTHERN STRIPED CUCKOO.

Coccyzus chochi VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, 1817, p. 272 (Paraguay).

Coccyzus cherriri VIEILLOT, Nouv. Dict. d'Hist. Nat., VIII, p. 273 (Paraguay).

Diplopterus nævius SCLATER and HUDSON, Argentine Orn., II, 1889, p. 35 (Argentina); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 423, part (southern Brazil, Paraguay, Uruguay, Argentina); CHUBB, Ibis, 1910, p. 272 (Paraguay).

Tapera nævia chochi BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 50 (form revived, with range including Paraguay, Uruguay and southern Brazil).

Range: Paraguay, Uruguay, southern Brazil and northern Argentina.

Genus **DROMOCOCCYX** Maximilian.

Dromococcyx Maximilian (Wied), Beitr. Naturg. Bras., IV, 1832, p. 351 (Type *Macropus phasianellus* Spix).

***Dromococcyx phasianellus** (*Spix*). PHEASANT CUCKOO.

Macropus phasianellus SPIX, Av. Bras., I, 1824, p. 53, pl. 42 (Forests of Rio Tonatine, Amazon Valley, Brazil).

Geophilus jasijatere BERTONI, Aves. Nuev. Paraguay, 1901, p. 43[b] (Paraguay and Missiones, Argentina).

[a] *Tapera nævia chochi* (VIEILLOT): Differs from *T. n. nævia* in being larger and browner with upper parts paler. Wing, 110–114; exposed culmen 15–16.5 mm. As noted by Bangs and Penard, both *nævia* and *chochi* differ from the Central American form, *T. n. excellens*, in their smaller bills, besides other characters.

[b] *Cf.* Richmond, Proc. U. S. Nat. Mus., XXXV, 1908, p. 611.

Dromococcyx phasianellus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 426; VON IHERING, Revis. Mus. Paulista, VI, 1904, p. 335 (Paraguay); HELLMAYR, Abh. k. Bayen. Akad. Wiss., Munchen, II, 1906, p. 600; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 87 (cut, pl. X); CHUBB, Ibis, 1910, p. 273 (Paraguay); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 214; DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 320 (Missiones, northeastern Argentina, etc.).

Range: Southeastern Mexico to western Brazil, Bolivia and Paraguay.

1: Panama (Chiriqui).

Dromococcyx pavoninus *Pelzeln* PEACOCK CUCKOO.

Dromococcyx pavoninus Pelzeln, Orn. Bras., III, Abth., 1870, p. 270 (Araguay, Engeenho do Gama, Brazil); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 427; BERLEPSCH, Nov. Zool., XV, 1908, p. 283 (Cayenne); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 87.

Dromococcyx pavonicus DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 321.

Dromococcyx gracilis RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, p. 559 (British Guiana).

Range: Guiana, Brazil, eastern Peru and northeastern Argentina (Missiones[a]).

Subfamily Crotophaginæ

Genus CROTOPHAGA Linn.

[*Crotophaga*] Linnæus, Syst. Nat., ed. 10, I, 1758, p. 105 (Type *Crotophaga ani* Linn.).

***Crotophaga major** *Gmel.* GREATER ANI.

[*Crotophaga*] *major* GMELIN, Syst. Nat., I, 1788, p. 363 (Cayenne).

Crotophaga major SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 428; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 92; GOELDI, Alb. Aves Amazon, pt. 3, 1905, pl. 25, fig. 6; DESCOURTILZ, Orn. Bras., 1852, pl. 15, fig. 1; CHUBB, Ibis, 1910, p. 273 (Paraguay); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 323 (Colombia); DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 321; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 50 (Paramaribo, Surinam).

Range: Eastern Panama and greater portion of South America, from the Guianas and Trinidad to Argentina, Paraguay, etc.

†11: Dutch Guiana 1; British Guiana 5; and Venezuela (Orope, Zulia) 5.

***Crotophaga sulcirostris** *Swainson.* GROOVE-BILLED ANI.

Crotophaga sulcirostris SWAINSON, Philos. Mag., 1827, p. 440 (Mexico); SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 432; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 94; SWARTH, Cooper Orn. Club, Pacific Coast Avi., No. 10, 1914, p. 32 (near Huachuca Mts. Arizona).

[a] *Cf.* Dabbene, *l. c.*

Range: Southern Arizona and southern Texas, Mexico and Central America to Ecuador, Peru, South America; British Guiana?

†58: Mexico (Guerro 10, Tampico 4, San Luis Potosi, 1, N. Leon 2, Yucatan 2); Guatemala 5; Nicaragua 8; Costa Rica (Limon, Guayabo, etc.) 14; Venezuela (Maracay 4, Rio Aurare 1); Curaçao Island 2; Peru (Puerto Arturo 1, near Balsas 1, Monocucho 2).

***Crotophaga ani** *Linn.* ANI.

[*Crotophaga ani*] LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 105 (Brazil).

Crotophaga ani CORY, Bds. Bahama Islands, 1880, p. 118 (col. pl. No. 1); *Id.*, Auk, 1886, p. 361; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 429; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VII, 1916, p. 97 (cut, pl. VI, fig. 2); GOELDI, Alb. Aves. Amazon, pt. 3, 1905, pl. 25, fig. 7; CHUBB, Ibis, 1910, p. 274 (Paraguay); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 1912, p. 95 (Pará District); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 323 (Colombia); STONE; Proc. Acad. Nat. Sci. Phila., 1918, p. 257, crit. breeding (Gatun and Mt. Hope, Panama Canal Zone).

Range: Bahamas and West Indies and Carribean Islands; coast district of Mexico and Central America and South America in general to Argentina; casual in southern Florida and southern Louisiana.

†201: Florida (New River, Dade county) 1; Bahama Islands (Bimini 1, Berry 1, Great Bahamas 2, Abaco 2, New Providence 5, Eleuthera 3, Grand Caicos 3, Great Inagua 1); Greater Antilles (Haiti 9, San Domingo 20, Jamaica 20, Grand Cayman 32, Porto Rico 4, Anegada 5, Virgin Gorda 16, Tortola 8, St. Croix 2); Lesser Antilles (Martinique 2, St. Lucia 5, St. Vincent 12, Grenada 6); Tobago Island 2; Margarita Island 8; Colombia 2; Venezuela 8; Dutch Guiana 2; British Guiana 3; Brazil 2; Peru 3; Panama (Colon) 2.

Genus GUIRA Lesson.

Guira Lesson, Traite d'Orn., 1831, p. 149 (Type *Cuculus guira* Gmelin).

***Guira guira** (*Gmel.*). GUIRA CUCKOO.

Cuculus guira GMELIN, Syst. Nat., I, 1788, p. 414 (Brazil).

Coccyzus guira QUOY and GAIMARD, Voy. Uranie, 1824, p. 114, pl. 26.

Guira piririgua KERR, Ibis, 1901, p. 229 (Gran Chaco); LÖNNBERG, Ibis, 1903, p. 454 (Bolivia); GRANT, Ibis, 1911, p. 325 (N. Argentina).

Guira guira SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 433; GOELDI, Alb. Aves Amazon, pt. 3, 1905, pl. 25, fig. 8; CHUBB, Ibis, 1910, p. 274 (Paraguay); GRANT, Ibis, 1911, p. 325 (N. Argentina); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 215.

Range: South America from northeastern and northcentral Brazil, south to Argentina and Chile.

7: Brazil (Ceará) 6[a]; Argentina (Quilmes) 1.

[a] Birds from Ceará, Brazil, average smaller than those from southern Brazil and Argentina. The wing measurements of four males from Ceará average 163 mm.

Order SCANSORES.

Suborder CAPITONES.

Family CAPITONIDÆ. The Barbets

Genus CAPITO Vieillot.*

Capito Vieillot, Analyse, 1816, p. 27 (Type *Bucco cayennensis* Gmelin = *Bucco niger* Müller).

***Capito aurovirens** (*Cuvier*). PLAINTIVE BARBET.

Bucco aurovirens CUVIER, Règne Anim., ed. 2, I, 1829, p. 458 (Peru).

Micropogon aurovirens BONAPARTE, Proc. Zool. Soc. Lond., 1837, p. 120.

Capito aurovirens GRAY, Gen. Bds., II, 1846, p. 430; MARSHALL, Mon. Capitonidae, 1871, p. 155, pl. 62; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 108; HELLMAYR, Nov. Zool., XIV, 1907, p. 81 (Teffe); VON IHERING, Revis. Mus. Paulista, VI, 1904, p. 446 (Rio Jurua); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 217 (Alto Rio Purus); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 322, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 324 (La Morelia, Colombia).

Range: Eastern Peru, eastern Ecuador, Colombia (Morelia) and northwestern Brazil.

1: Peru (Rio Ucayali).

Capito maculi-coronatus maculi-coronatus *Lawrence*. BLACK-THROATED BARBET.

Capito maculi-coronatus LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., CII, 1862, p. 300 (Lion Hill?, Panama).

Capito maculicoronatus SCLATER, Ibis, 1862, pl.1; MARSHALL, Mon. Capitonidæ, 1871, p. 153, pl. 61; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 109, part; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 548, part; BANGS, Proc. N. E. Zool. Club, II, 1900, p. 18 (Loma del Leon, Panama); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 322, in key.

Capito maculicoronatus maculicoronatus STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 258 (Mt. Hope, Panama Canal Zone).

Range: Panama (from Canal Zone westward).

2: Panama.

* Arrangement as adopted by Ridgway (Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 320). Much uncertainty exists as to synonomy and relationships of several forms, but any attempt to revise the genus without much larger series of specimens (with proper data) representing the various supposed species, than is at present available, would only add to the confusion.

Capito maculi-coronatus pirrensis *Nelson.* PIRRI BARBET.

Capito maculicoronatus pirrensis NELSON, Smiths. Misc. Coll., LX No. 21, 1913, p. 1 (Cana, base of Mt. Pirri, eastern Panama); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 324; HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1198 (Novita; Noanama; Rio Cajou, western Colombia; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 324, (Salaqui, Colombia).

Range: Southeastern Panama and western Colombia.

***Capito maculi-coronatus rubrilateralis** *Chapman.* COLOMBIAN BLACK-THROATED BARBET.

Capito maculicoronatus rubrilateralis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXI, 1912, p. 144 (Juntas de Tamaná, Colombia); *Id.*, XXXVI, 1917, p. 324 (western Colombia).

Range: Western Colombia.[a]

1: Colombia (El Tigre, Rio Tamana).

***Capito squamatus** *Salvin.* RUFOUS-FRONTED BARBET.

Capito squamatus SALVIN, Ibis, 1876, p. 494, pl. XIV (Santa Rita, western Ecuador); TACZANOWSKI and BERLEPSCH, Proc. Zool. Soc. Lond., 1885, p. 118; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 110; GOODFELLOW, Ibis, 1902, p. 218, crit. (Santo Domingo, Ecuador); MENEGAUX, Bull. Mus. d'Hist. Nat., Paris, 1908, p. 108 (Napo); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 325, crit. (Ricaurte, southwestern Colombia).

Range: Western Ecuador and southwestern Colombia?[b]

1: Western Ecuador (Avia Maria).

Capito hypoleucus *Salvin.* SALVIN'S BARBET.

Capito hypoleucus SALVIN, Bull. Brit. Orn. Club, VII, 1897, p. XVI, (Valvidia, Antioquia, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 322, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 362 (Puerto Valdivia, La Frijolera; Central Andes west of Honda, 5000 ft.; El Carmen de Jacopi, western slope of Andes in Bogotá region).

Range: Colombia.

Capito quinticolor *Elliot.* FIVE-COLORED BARBET.

Capito quinticolor ELLIOT, Nouv. Arch. Mus., Paris, I, 1865, p. 76, pl. 4, fig. 1 (Colombia); MARSHALL, Mon. Capitonidæ, 1871, p. 163, pl. 65; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 111; DELMAS, Bull. Soc. Zool. France, XXV, 1900, p. 176 (El Paillon, near Buenaventura); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1198 (Tadó, western Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 322, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 326 (Barbacoas).

Range: Western Colombia.

[a] "Inhabits the tropical zone of the Pacific Coast, at least as far south as Buenaventura and, at the north, extends eastward through this zone east of the Atrato to Magdalena drainage at Remedios" (CHAPMAN, *l. c.*).

[b] The specimen from Ricaurte, Colombia is not typical and may prove to represent a new subspecies (*cf.* CHAPMAN, *l. c.*).

***Capito niger** (*Müller*). BLACK-SPOTTED BARBET.

Bucco niger MÜLLER, Syst. Nat., Suppl., 1776, p. 89 (Cayenne).

Capito niger MARSHALL, Mon. Capitonidæ, 1871, p. 157, pl. 63; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 111; BERLEPSCH, Nov. Zool., XV, 1908, p. 280 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 217 (Obidos, Rio Jamunda, Brazil); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 320, in key (Guiana, Surinam and Cayenne); CHUBB, Bds. Brit. Guiana, I, 1914, p. 450 (Guiana, Cayenne and Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 56; (Paramaribo, Lilydorp, etc., Surinam).

Range: The Guianas, "Venezuela",[a] "North Brazil (Rio Jamunda)".[b]

3: British Guiana (Demerara R.) 1; Surinam (near Paramaribo) 2.

***Capito peruvianus** (*Cuvier*). PERUVIAN BARBET.

(?) *Bucco peruvianus* CUVIER, Règne Anim., 1817, p. 428, footnote (Peru; based on *Le Barbu orangé de Pérou*, Levaillant, Barbus, pl. 27).

Capito peruvanius SCLATER, Cat. Am. Bds., 1862, p. 329, part; Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 321, in key.

Mycropogon aureus TEMMINCK, Pl. Col., livr. 83, 1830, p. 2.

(?) *Capito amazonicus* DEVILLE and DES MURS, Rev. Mag. Zool., 1849, p. 171 (Ega and Santa Maria, eastern Peru); Sclater, Ibis, 1861, p. 186.

(?) *Micropogon amazonicus* DES MURS, Zool. Voy. Castelnau, Ois. 1855, p. 28.

Range: Eastern Ecuador, eastern Peru.

1: Peru (Yahuas Terr.).

Capito aurantiiventris *Ridgway*. ORANGE-VENTED BARBET.

Capito aurantiiventris RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 87 (Upper Amazon Valley?, probably Rio Negro or Rio Tapajos); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 321, in key.

(?) *Capito amazonicus* DEVILLE and DES MURS, Rev. Mag. Zool., 1849, p. 171, part (?).

(?) *Micropogon amazonicus* DES MURS, Zool. Voy. Castelnau, Ois., 1855, p. 28, part.

Range: Upper Amazon Valley; eastern Peru?

***Capito auratus auratus** (*Dumont*). GOLD-FRONTED BARBET.

Bucco auratus DUMONT, Dict. Sci. Nat., IV, 1816, p. 54 (Peru).

Capito auratus TACZANOWSKI, Proc. Zool. Soc. Lond., 1874, p. 549 (Peru); MENEGAUX, Bull. Mus. d'Hist. Nat., Paris, 1908, p. 108 (Ecuador).

Bucco punctatus DES MURS, Icon. Orn., 1846, pl. 20.

Capito punctatus SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 112; GOODFELLOW, Ibis, 1902, p. 218 (Ecuador).

Capito auratus auratus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 321, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 326 (La Morelia; Florencia; Villavicencio; Buena Vista, Colombia); HELLMAYR, Nov. Zool., XIV, 1907, p. 82.

[a] Chubb, *l. c.*

[b] Snethlage, *l. c.*

Range: Colombia, east to the Guianas and eastern Peru; eastern Ecuador.

4: Peru (Moyobamba 2, "Peru" 1); Colombia (Bogotá) 1.

Capito auratus aurantiicinctus (*Delmas.*)[a] ORANGE-BANDED BARBET.

Capito aurantiicinctus DELMAS, Bull. Soc. Zool. France, 1900, p. 178 (Caura River).

Capito auratus aurantiicinctus BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 99 (Nicare, Venezuela); CHERRIE, Mus. Brooklyn Inst. Art. & Sci., Sci. Bull., II, 1916, p. 316 (La Union, Caura River), crit.

Capito auratus intermedius BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 98; HELLMAYR, Nov. Zool., XIV, 1907, p. 82; *Id.*, XVII, 1910, p. 395 (Colima); CHERRIE, Mus. Brooklyn Inst. Art. & Sci., Sci. Bull., II, 1916, p. 316, crit.; *Id.*, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 392, in text, crit.; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 326, in text, crit.

Range: Interior of Venezuela (Upper Orinoco; Caura River, etc.)

Capito auratus bolivianus *Ridgway.* BENI BARBET.

Capito auratus bolivianus RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 87 (Rio Beni, Bolivia); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 322, in key.

Range: Bolivia (Rio Beni region).

Capito auratus insperatus *Cherrie.*[b] CHAPARE BARBET.

Capito auratus insperatus CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 391 (Todos Santos, Rio Chapare, Bolivia).

Range: Bolivia (Rio Chapare region).

Capito dayi[c] *Cherrie.* DAY'S BARBET.

Capito dayi CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 394 (Porto Velho, near San Antonio, Rio Madeira, western Brazil).

Range: Upper Madeira River (Porto Velho) and western Matto Grosso (Monte Cresto), western Brazil.

[a] *Capito a. aurantiicinctus* DELMAS: Differs from *C. a. auratus* in having the forehead yellow and throat much deeper orange; middle of abdomen and middle of lower breast yellow.

[b] *Capito auratus insperatus* CHERRIE: Differs from *C. a. auratus* by having the throat unspotted, and from *aurantiicinctus* by absence of yellow on the middle of the lower breast or abdomen.

[c] *Capito dayi* CHERRIE: Plumage without streaks or spots (either above or below), but feathers of the cheeks and throat tipped with narrow blackish bars producing a scale like appearance; entire top of head bright scarlet red (in males) or black (in females); sides of head black; chin and throat tawny olive marked with black; breast and line on middle belly, buffy white shading into pale greenish yellow on center of abdomen; sides of breast (narrowly) and sides of body and flanks (and extending over the sides of the lower breast and upper abdomen, except the middle line) deep black; thighs dull green; under tail coverts scarlet.

Genus EUBUCCO Bonaparte.

Eubucco Bonaparte, Consp. Av., I, 1850, p. 142 (Type *Capito richardsoni* Gray).

Eubucco richardsoni richardsoni (*Gray*). RICHARDSON'S BARBET.

Capito richardsoni GRAY, Gen. Bds., II, 1846, pl. 106 (Ecuador); MARSHALL, Mon. Capitonidæ, 1871, p. 173, pl. 69; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 114, pl. 5, fig. 3; GOODFELLOW, Ibis, 1902, p. 218 (Archidona, eastern Ecuador); MENEGAUX, Bull. Mus. d'Hist. Nat., 1908, p. 108 (Napo).

Eubucco richardsoni BONAPARTE, Consp. Av., I, 1850, p. 142.

Capito sulphureus EYTON, Jardine's Contr. Orn., 1849, p. 130.

Eubucco richardsoni richardsoni RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key.

Range: Eastern Ecuador.

***Eubucco richardsoni granadensis** (*Shelley*). SHELLEY'S BARBET.

Capito granadensis SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 115, pl. 5, fig. 5 (Bogotá).

Eubucco richardsoni granadensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 327 (Buena Vista, Colombia).

Range: Central and eastern Colombia.

2: Colombia (Bogotá).

Eubucco aurantiicollis *Scalter*. ORANGE-NECKED BARBET.

Eubucco aurantiicollis SCLATER, Proc. Zool. Soc. Lond., 1857, p. 267 (Rio Javirri, eastern Peru); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key.

Capito aurantiicollis SCLATER, Ibis, 1861, p. 119; MARSHALL, Mon. Capitonidæ, 1871, p. 175, pl. 70; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 115; HELLMAYR, Nov. Zool., XVII, 1910, p. 395 (Calama); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 218 (Rio Purus).

Capito auratus aurantiicollis HELLMAYR, Nov. Zool., XIV, 1907, p. 82, crit.

Capito melanotis SCLATER, Ibis, 1861, p. 190, descr. female (Ucayali, Rio Javarri).[a]

Range: Eastern Peru and extreme western Brazil (Rio Purus).

Eubucco steerii (*Sclater and Salvin*). STEERE'S BARBET.

Capito steerii SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1878, p. 140, pl. 12 (fig. innacc.) (Moyobamba, eastern Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 143; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 116, pl. 5, fig. 2.

Eubucco steerii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key.

Range: Eastern Peru.

Eubucco versicolor (*Müller*). MANY-COLORED BARBET.

Bucco versicolor MÜLLER, Syst. Nat., Suppl., 1776, p. 88 (Maynas, eastern Peru).

Capito versicolor SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 116; MARSHALL, Mon. Capitonidæ, 1871, p. 171, pl. 68; TACZANOWSKI, Orn. Pérou, III, 1886, p. 141.

[a] *Cf.* HELLMAYR, Nov. Zool., XVII, 1910, p. 395, footnote.

Bucco pictus BODDAERT, Tabl. Pl. Enl., 1783, p. 20.
Eubucco pictus SCLATER, Proc. Zool. Soc. Lond., 1857, p. 268.
Capito pictus SCLATER, Ibis, 1861, p. 187.
Bucco elegans GMELIN, Syst. Nat., I, 1788, p. 406.
Capito maynalensis VIEILLOT, Nouv. Dict. d'Hist. Nat., IV, 1816, p. 497.
Eubucco versicolor RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key.

Range: Peru and Bolivia.

***Eubucco glaucogularis** (*Tschudi*). GLAUCOUS-THROATED BARBET.

Capito glaucogularis TSCHUDI, Wiegmann's Arch. für. Naturg., 1844, p. 301 (Peru); *Id.*, Fauna Peruana, Aves, 1845, p. 259, pl. 24, fig. 2; MARSHALL, Mon. Capitonidæ, 1871, p. 169, pl. 67; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 117.
Eubucco glaucogularis SCLATER, Proc. Zool. Soc. Lond., 1857, p. 268; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 316, in key.
Capito tschudii; SCLATER, Ibis, 1861, p. 188 (eastern Peru).

Range: Eastern Peru.
1: Peru (Chunchamayo).

***Eubucco bourcieri bourcieri** (*Lafresnaye*). BOURCIER'S BARBET.

Micropogon bourcieri LAFRESNAYE, Rev. Zool., VIII, 1845, p. 179 (Bogotá, Colombia).
Capito bourcieri SCLATER, Proc. Zool. Soc. Lond., 1854, p. 115; MARSHALL, Mon. Capitonidæ, 1871, p. 165, pl. 66; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 118, pl. 5, fig. 6.
Micropogon hartlaubii LAFRESNAYE, Rev. Zool., VIII, 1845, p. 180 (Bogotá).
Eubucco bourcieri bourcieri RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 315, in key.

Range: Central Colombia (from Bogotá region to eastern slope of the central Andes).
2: Colombia (Bogotá ?).

Eubucco bourcieri occidentalis[a] *Chapman*. WESTERN COLOMBIAN BARBET.

Eubucco bourcieri occidentalis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 608 (San Antonio, Colombia); *Id.*, XXXIV, 1917, p. 327 (San Antonio; La Frijolera, subtropical zone of western Andes, Colombia).
Capito bourcieri salvini HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1199 (Loma Hermosa; Pueblo Rico, western Colombia).

Range: Western Andes, Colombia.

[a] *Eubucco bourcieri occidentalis* CHAPMAN: Similar to *E. b. salvini*, but more richly colored and averaging larger; red of throat slightly deeper and more sharply defined from the tawny orange of the breast, which is deeper and more extensive; flanks and abdomen more distinctly yellow.

***Eubucco bourcieri salvini** (*Shelley*). SALVIN'S BARBET.

Capito salvini SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 119, pl. 5, fig. 4, part (Panama to Costa Rica); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 549; BANGS, Proc. N. E. Zool. Club, III, 1902, p. 32 (western Panama).

Capito bourcieri salvini CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 570 (Costa Rica).

Eubucco bourcieri salvini RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 317.

Range: Costa Rica and western Panama.

4: Costa Rica (Terraba 1, Estella de Cartago 1); Panama (Chiriqui 1, "Panama" 1).

Eubucco bourcieri æquatorialis (*Salvadori and Festa*). EQUATORIAL BARBET.

Capito æquatorialis SALVADORI and FESTA, Boll. Mus. Zool., Torino, XV, 1900, p. 22 (Intac, W. Ecuador).

C[apito] b[ourcieri] æquatorialis MENEGAUX, Bull. Soc. Philom., 1908, p. 4, in text (Gualea, western Eucador).

Eubucco bourcieri æquatorialis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 610, in text, crit.; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 315, in key.

(?) *Capito shelleyi* DELMAS, Bull. Soc. Zool., 1900, p. 175 (Napo, eastern Ecuador)[a]

Range: Western and central Ecuador.

Eubucco bourcieri orientalis[b] *Chapman*. EASTERN EQUATORIAL BARBET.

Eubucco bourcieri orientalis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 609 (Prov. Loja, eastern slope of Andes, Ecuador).

Eubucco bourcieri shelleyi (nec. Delmas) RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 315 (eastern Ecuador).

Range: Eastern Ecuador.

Eubucco tucinkæ (*Seilern*).[c] SEILERN'S BARBET.

Capito tucinkæ SEILERN, Verh. Orn. Gesell. Bayern, XI, 1913, p. 276 (Yahuarmayo, Carabaya, southeastern Peru).

Range: Eastern slope of the Andes (Carabaya region), southeastern Peru.

[a] *Cf.* Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1200, in text.

[b] *Eubucco bourcieri orientalis* CHAPMAN: "Similar to *E. b. salvini*, but male with the sides of the breast sulphur-yellow; female with the posterior margin of the black frontlet blue." (Chapman, *l. c.*).

[c] *Eubucco tucinkæ* (SEILERN). Nearest to *Eubucco b. bourcieri*, but readily distinguished by the yellowish olive (instead of deep green) back, wings and tail, and the sulphur-yellow (instead of pale bluish) narrow band on the nape, separating the red of the crown from the color of the back; stripes on sides of body narrower and paler green; wings and tail longer; bill larger.

Wing, 78; tail, 63; bill, 20 mm.

Genus SEMNORNIS Richmond

Tetragonops (not of Gertsäcker, March, 1855) Jardine, Edinburgh Phil. Journ., N. S., II, October, 1855, p. 404 (Type *T. rhamphastinus* Jardine).

Pan (not of Oken, 1816) RICHMOND, Auk, 1899, p. 77 (to replace *Tetragonops* Jardine, preoccupied).

Semnornis RICHMOND, Auk, 1900, p. 179 (to replace *Pan* Richmond, 1899, preoccupied).

Semnornis rhamphastinus (*Jardine*). TOUCAN BARBET.

Tetragonops rhamphastinus JARDINE, Edinburgh Phil. Journ., N. S., II, 1855, p. 404 (Quito, Ecuador); MARSHALL, Mon. Capitonidæ, 1871, p. 1, pl. 1; TACZANOWSKI and BERLEPSCH, Proc. Zool. Soc. Lond., 1885, p. 116; SHELLEY, Cat. Bds. Brit. Mus., XIX, 1891, p. 120.

Semnornis rhamphastinus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1200 (La Tigre, Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 327, crit. (San Antonio, Colombia).

Range: Ecuador and Colombia.

Genus DICRORHYNCHUS Carriker.

Dicrorhynchus Carriker, Ann. Carnegie Mus., VI, 1910, p. 571 (Type *Tetragonops frantzii* Sclater).

*Dicrorhynchus frantzii (*Sclater*). COSTA RICAN BARBET.

Tetragonops frantzii SCLATER, Ibis, 1864, p. 371, pl. 10 (Costa Rica); MARSHALL, Mon. Capitonidæ, 1871, p. 3, pl. 2; Shelley, Cat. Bds. Brit. Mus., XIX; 1891, p. 121; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 550., BANGS, Proc. N. E. Zool. Club, III, 1902, p. 32 (Chiriqui; Boquete, etc., Panama).

Semnornis frantzii FERRY, Field Mus. Nat. Hist., Orn. Ser., 1, 1910, p. 265 (Costa Rica).

Dicrorhynchus frantzii CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 571 (Irazú; La Hondura, etc., Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 325.

Range: Highlands of Costa Rica and western Panama.

10: Costa Rica (Coliblanco 6, El Roble 1, Cartego 1, interior west of Limon 2).

Suborder RAMPHASTIDES

Family RAMPHASTIDÆ. Toucans.

Genus RAMPHASTOS Linnæus.

Ramphastos Linnæus, Syst. Nat., ed. 10, I, 1758, p. 103; *Id.*, ed. 12, I, 1766, p. 150 (Type *R. tucanus* Linnæus).

Rhamphastos (emendation) Daudin, Traité Elém. Compl. Orn., 1800, pp. 376,422.

***Ramphastos toco** *Müller.* TOCO TOUCAN.

Ramphastos toco MÜLLER, Syst. Nat. Suppl., 1776, p. 82 (Cayenne); GOULD, Mon. Ramphastidæ, ed. I, 1834, pl. 6 and text; *Id.*, ed. 2, 1854, pl. 1 and text; GOELDI, Alb. Aves Amazon, pt. I, 1900, pl. II, fig. 1; BERLEPSCH, Nov. Zool., XV, 1908, p. 280 (Cayenne).

Rhamphastos toco SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 124; DESCOURTILZ, Orn. Bras., pl. 13, fig. 1; GRANT, Ibis, 1911, p. 325 (Bolivian Chaco); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 220 (Marajo; Mexiana; Monte Allegre, etc., Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 453.

Range: Guiana, Brazil, Paraguay, Bolivia and northern Argentina.

3: Brazil (São Marcello, Rio Preto, Bahia) 2; Argentina (Prov. Salta) 1.

***Ramphastos piscivorus piscivorus** *Linnæus.* KEEL-BILLED TOUCAN.

Ramphastos piscivorus LINNÆUS, Syst. Nat. ed. 12, 1766, p. 151 ("America").

Ramphastos carinatus GOULD, Mon. Ramphastidæ, I, 1854, p. 7; *Id.*, ed. 2, 1854, pl. 2 and text.

Rhamphastos carinatus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 125, part.

Ramphastos piscivorus piscivorus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 332.

Range: Southern Mexico to Guatemala and British Honduras.

6: Mexico (Vera Cruz) 2; Guatemala (Los Amates, Izabel) 3; British Honduras 1.

***Ramphastos piscivorus brevicarinatus** (*Gould*). SHORT-KEELED TOUCAN.

Ramphastos brevicarinatus GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 3 and text (Panama).

Rhamphastos brevicarinatus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 126.

Ramphastos piscivorus brevicarinatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 334; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 328 (Rio Salaqui, Colombia); STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 258, crit. coloration in life (Gatun, Panama Canal Zone).

Range: Honduras southward to Colombia, Venezuela and Trinidad.

9: Panama 2; Costa Rica (Guayabo 3, Orosi 1, Juan Viños 1); Colombia 2.

***Ramphastos swainsonii** *Gould.* SWAINSON'S TOUCAN.

Ramphastos swainsonii GOULD, Proc. Zool. Soc. Lond., 1833, p. 69 (Mts. of Colombia); *Id.*, Mon. Ramphastidæ, ed. 1, 1833, pl. 8 and text; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 336; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 328, pl. XXXVIII, fig. 2 (numerous localities in Colombia).

Rhamphastos tocard SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 127 (also of authors).

Range: Southern Honduras, southward to Colombia, Venezuela and Ecuador.

4: Costa Rica (Orosi 1, interior west of Limon 2); Ecuador (Huigua) 1.

***Ramphastos ambiguus ambiguus** *Swainson.* SWAINSON'S DOUBTFUL TOUCAN.

Ramphastos ambiguus SWAINSON, Zool. Illust., III, 1823, pl. 168 and text (type locality by designation, Buena Vista, above Villavicencio, Colombia);[a] GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 5 and text; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 339, part.

Rhamphastos ambiguus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 128, part.

Ramphastos ambiguus ambiguus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 328 (La Palma; near San Augustin; La Candela; Andalucia; Fusugasuga; Buena Vista, Colombia).

Range: Interior of central and eastern Colombia; Venezuela?[a] and Trinidad?[b]

2: Colombia (Bogotá?).

Ramphastos ambiguus abbreviatus[c] *(Cabanis).* LESSER SWAINSON'S TOUCAN.

R[amphastos] abbreviatus CABANIS, Journ. für Ornith., 1862, p. 334 ("Kustengegend von New Grenada, von Porto Cabello").

Ramphastos ambiguus abbreviatus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 329, crit. (Iguamiando; Chaco; Novita; San José; Barbacoas, Colombia).

Range: Panama, southward in tropical zone of western Colombia and western Ecuador; also northern Colombia eastward through Antioquia to the Magdalena Valley and probably coast of Venezuela.

***Ramphastos monilis** *Müller.* RED-BILLED TOUCAN.

Ramphastos monilis MÜLLER, Syst. Nat., Suppl., 1776, p. 83 (ex. Daubenton, Pl. Enl. 262, Type ex Cayenne); BERLEPSCH, Nov. Zool., XV, 1908, p. 280 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 220 (Prara; Rio Capim; Rio Tocantins; Rio Tapajos; Rio Jamunda, etc., Brazil); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 198 (Guinipa, Venezuela); CHUBB, Bds. Brit. Guiana, I, 1916, p. 454; HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 55 (Paramaribo and Lelydorp, Surinam).

(?) *R[amphastos] tucanus* LINNÆUS, Syst. Nat., ed. I, 1758, p. 103.

[a] *Cf.* Chapman, *l. c.*

[b] I have seen no specimens from Venezuela or Trinidad and am in doubt as to which race they represent.

[c] *Ramphastos ambiguus abbreviatus* (CABANIS): Similar to *R. a. ambiguus*, but smaller; male, wing about 200; tail, 149, or less; bill, 145, or less.

Ramphastos erythrorhynchus GOULD, Mon. Ramphastidæ, ed. I, 1834, pl. 3 and text; *Id.*, ed. 2, 1854, pl. 6 and text.

Ramphastos hæmatorhynchus BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 99 (La Pricion, Caura R., Venezuela).

Rhamphastos erythrorhynchus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 128; GOELDI, Alb. Aves Amazon, pt. 1, 1900, pl. 11, figs. 2a and 2b; HELLMAYR, Nov. Zool., XII, 1905, p. 299, crit. (Pará).

Range: Guiana, Venezuela and north and northeastern Brazil.

4: British Guiana 3, Dutch Guiana (near Paramaribo) 1.

Ramphastos cuvieri cuvieri *Wagler*. CUVIER'S TOUCAN.

Ramphastos cuvieri WAGLER, Syst. Av. Ramphast., 1827, p. 5 (Amazon River Region, Brazil); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 2 and text; *Id.*, ed. 2, 1854, pl. 8 and text; HELLMAYR, Nov. Zool., XIV, 1907, p. 399 (Humaytha, Rio Madeira, Brazil); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 330 (La Morelia; Florencia; Barrigon; Colombia).

Rhamphastos cuvieri SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 130; GOELDI, Alb. Aves, Amazon, pt. I, 1900, pl. 11, fig. 5; GOODFELLOW, Ibis, 1902, p. 215 (Rio Napo, Ecuador).

Ramphastos cuvieri cuvieri HELLMAYR, Nov. Zool., XVII, 1910, p. 396 (Calama, Rio Madeira, Brazil).

Range: Northern and northwestern Brazil, north Peru, Ecuador and Colombia.

Ramphastos cuvieri inca (*Gould*). INCA TOUCAN.

Ramphastos inca GOULD, Proc. Zool. Soc. Lond., 1846, p. 68 (Chimoree, Bolivia); *Id.*, Mon. Ramphastidæ, ed. 2, 1854, pl. 7 and text; TACZANOWSKI, Orn. Pérou, III, 1886, p. 146.

Rhamphastos inca SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 129.

Ramphastos cuvieri inca BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 99 (Munduapo, Upper Orinoco); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 317 (Munduapo, Venuezela).

Range: Bolivia and eastern Peru, southwestern Venezuela (Munduapo).[a]

***Ramphastos culminatus** *Gould*. CULMINATED TOUCAN.

Ramphastos culminatus GOULD, Proc. Zool. Soc. Lond., 1833, p. 70 (Mexico—Colombia, as designated by Brabourne and Chubb)[b]; *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 11 and text; STURM, Mon. Ramphastidæ, pt. 1, pl. 1; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 101 (Munduapo; Nericagua, upper Orinoco); HELLMAYR, Nov. Zool., XIV, 1907, p. 399 (Humaytha, Rio Madeira, Brazil); *Id.*, XVII, 1910, p. 396 (Marmellos, etc., Rio Madeira); CHAPMAN, Bull. Am. Mus., Nat. Hist., XXXVI, 1917, p. 330, pl. XXXVIII, fig. 4 (Buena Vista; Villavicencio, Colombia).

Rhamphastos culminatus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 130.

[a] *Cf.* Berlepsch and Hartert, *l. c.*; Cherrie, *l. c.*

[b] Bds. So. Am., I, 1912, p. 156, No. 1530.

Range: Colombia and Venezuela, southward to Ecuador, Peru, Bolivia and northwestern Brazil.

1: Peru (Yurimaguas).

Ramphastos citreolæmus *Gould.* YELLOW-THROATED TOUCAN.

Ramphastos citreolæmus GOULD, Proc. Zool. Soc. Lond., 1843, p. 147 (Bogotá, Colombia); *Id.*, Mon. Ramphastidæ, ed. 2, 1854, pl. 9 and text; WYATT, Ibis, 1871, p. 379 (Colombia); SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1879, p. 537 (Antioquia, Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI 1917, p. 330, pl. XXXVIII, fig. 3 (Puerto Valdivia; La Frijolera; Puerto Berrio; Malena; west of Honda, Colombia).

Rhamphastos citreolæmus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 131.

Range: Colombia.

Ramphastos osculans *Gould.* OSCULANT TOUCAN.

Ramphastos osculans GOULD, Proc. Zool. Soc. Lond., 1835, p. 156 (Brasil = Rio Negro, northern Brazil, by designation)[a]; *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 5 and text; *Id.*, ed. 2, 1854, pl. 10 and text; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 100 (Munduapo, upper Orinoco); BERLEPSCH, Nov. Zool., XV, 1908, p. 281 (Cayenne); HELLMAYR, Nov. Zool. XVII, 1910, p. 397 (Borba, Rio Madeira); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 317 (Munduapo); CHUBB, Bds. Brit. Guiana, I, 1916, p. 445.

Range: Northern Brazil, Venezuela and Guiana.

Ramphastos theresæ[b] *Reiser.* THERESA'S TOUCAN.

Ramphastos theresæ REISER, Anz. Ak. Wiss. Wien, 1905, No. XVIII, p. 322 (Rio Paranahyba, Piauhy, northeastern Brazil); BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 157, No. 1534.

Range: Northeastern Brazil.

***Ramphastos ariel** *Vigors.* ARIEL TOUCAN.

Ramphastos ariel VIGORS, Zool. Journ., II, 1826, p. 466 (Rio de Janeiro); DESCOURTILZ, Orn. Bras., 1852, pl. 12, fig. 1; GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 10 and text; *Id.*, ed. 2, 1854, pl. 12 and text; HELLMAYR, Nov. Zool., XIII, 1906, p. 380 (Prata, Distr. of Pará); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Rhamphastus ariel GOELDI, Ibis, 1903, p. 498 (Rio Capim).

Rhamphastos ariel SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 131; GOELDI, Alb. Aves Amazon, pt. I, 1900, pl. 11, figs. 4a, 4b; HELLMAYR, Nov. Zool.,

[a] *Cf.* Berlepsch and Hartert, *l. c.*

[b] *Ramphastos theresæ* REISER: Intermediate between *R. osculans* and *R. ariel.* Differs from *osculans* in having a light blue spot at the base of the upper mandible (instead of a white stripe); differs from *ariel* by the saffron instead of red upper tail coverts, whitish yellow cheeks and small red spot on breast; bill smaller.

XII, 1905, p. 300 (Distr. Pará); SNETHLAGE, Bol. Mus. Goeldi, VII, 1914, p. 221 (Pará; Providencia; Benevideo; Peixe-Boi; Rio Capim; Rio Acara; Rio Tocantins; Rio Tapajoz; Rio Jamauchim, etc.).

Range: Eastern Brazil.

1: Brazil.

***Ramphastos vitellinus**[a] *Lichtenstein.* SULPHUR AND WHITE-BREASTED TOUCAN.

Ramphastos vitellinus LICHTENSTEIN, Verz. Doubl., 1823, p. 7 ("Cayana"); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 9 and text; *Id.*, ed. 2, 1854, pl. 13 and text; BERLEPSCH and HARTERT, Nov. Zool., 1902, p. 101 (Guapure, Orinoco region); HELLMAYR, Nov. Zool., XIII, 1906, p. 42 (Trinidad); BERLEPSCH, Nov. Zool., XV, 1908, p. 281 (Cayenne); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 199 (Venezuela); CHUBB, Bds. Brit. Guiana, I, 1916, p. 456; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 55 (Paramaribo and Lelydorp, Surinam).

Rhamphastos vitellinus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 132; GOELDI, Alb. Aves Amazon, pt. I, 1900, pl. 11, fig. 3; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 221 (Cunany; Obidos; Rio Jamunda, Brazil).

Range: Guiana, Venezuela, Trinidad and northeastern Brazil.

3: British Guiana.

***Ramphastos discolorus** *Linnæus.* RED-BREASTED TOUCAN.

Ramphastos discolorus LINNÆUS, Syst. Nat., ed. 12, 1766, p. 152 ("Cayana" = southeastern Brazil); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 11 and text; DESCOURTILZ, Orn. Bras., 1852, pl. 12, fig. 2.

Rhamphastos discolorus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 133; HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 230 (Iguazu, Argentina); CHUBB, Ibis, 1910, p. 275 (Sapucay, Paraguay); DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 311.

Range: Paraguay, southeastern Brazil and northeastern Argentina.

2: Brazil (Cajoa).

Genus **ANDIGENA** Gould.

Andigena Gould, Proc. Zool. Soc. Lond., 1850, p. 93 (Type *Pteroglossus hypoglaucus* Gould).

***Andigena hypoglaucus** (*Gould*). GRAY-BREASTED ARACARI.

Pteroglossus hypoglaucus GOULD, Proc. Zool. Soc. Lond., 1833, p. 70 (no locality = Colombia); *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 19 and text; STURM, Mon. Ramphastidæ, pt. 11, pl. 4.

Andigena hypoglauca GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 38 and text; TACZANOWSKI, Orn. Pérou, III, 1886, p. 157.

[a] *Ramphastos citreopygius* GOULD is an artifact made from the body of *R. vitellinus* and the head of *R. monilis* (cf. HELLMAYR, Nov. Zool., XX, 1913, p. 254).

Andigena hypoglaucus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 134; GOODFELLOW, Ibis, 1902, p. 217 (Papallacta, Ecuador); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 330 (Almaguer; Lagunita; Santa Isabel, Colombia).

Range: Colombia, Ecuador and west Peru.

1: "Ecuador."

Andigena cucullatus (*Gould*). HOODED ARACARI.

Pteroglossus cucullatus GOULD, Proc. Zool. Soc. Lond., 1846, p. 69 (Cochabamba).

Andigena cucullatus GOULD, Proc. Zool. Soc. Lond., 1850, p. 93; *Id.*, Mon. Ramphastidæ, ed. 2, 1854, pl. 39 and text; SCLATER, Cat. Bds. Brit. Mus., XIX 1891, p. 134 (Tilotilo, Bolivia); TACZANOWSKI, Proc. Zool. Soc. Lond., 1874 p. 548 (C. Peru); *Id.*, 1882, p. 45 (N. Peru).

Range: Peru and Bolivia.

Andigena laminirostris *Gould*. THIN-BILLED ARACARI.

Andigena laminirostris GOULD, Proc. Zool. Soc. Lond., 1850, p. 93 (Quito, Ecuador); *Id.*, Mon. Ramphastidæ, ed. 2, 1854, pl. 37 and text; BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1885, p. 121 (W. Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 158; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 135 (Quito; Pallatanga; Jima, Ecuador); GOODFELLOW, Ibis, 1902, p. 217 (Milligalli, Ecuador).

Range: Ecuador and Peru.

***Andigena nigrirostris nigrirostris** (*Waterhouse*). BLACK-BILLED ARACARI.

Pteroglossus nigrirostris WATERHOUSE, Proc. Zool. Soc. Lond., 1839, p. 111 (no locality given = Subia, near La Mesa, Colombia, by designation).[a]

Andigena nigrirostris GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 40 and text; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 135; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 331 (Subia, Colombia).

Range: Eastern Andes of Colombia and Ecuador.

5: Colombia (Paramo de Tama, eastern Colombia, near Venezuelan line).

***Andigena nigrirostris spilorhynchus** (*Gould*). ECUADORIAN BLACK-BILLED ARACARI.

Andigena spilorhynchus GOULD, Proc. Zool. Soc. Lond., 1858, p. 149 ("Forest of Baeza, on the eastern side of the Cordillera, Ecuador"); SCLATER, Cat. Bds. Brit., Mus., XIX, 1891, p. 136.

Andigena nigrirostris spilorhynchus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 331 (Central Andes, Colombia).

Range: Central Andes of Colombia and northern Ecuador.

1: "Colombia."

[a] *Cf.* Chapman, *l. c.*

Andigena nigrirostris occidentalis *Chapman.*[a] WESTERN BLACK-BILLED ARACARI.

Andigena nigrirostris occidentalis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 385 (San Antonio, above Cali, western Andes, Colombia); *Id.*, XXXVI, 1917, p. 332, pl. XXXVIII, fig. 1 (San Antonio; Cerro Munchique; La Florida, Colombia).

Range: Western Andes, Colombia.

Genus **BAILLONIUS** Cassin.

Baillonius Cassin, Proc. Acad. Nat. Sci. Phila., XIX, 1867, p. 114 (Type *Ramphastos bailloni* Vieillot); Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 329.

***Baillonius bailloni** (*Vieillot*). SAFFRON-COLORED ARACARI.

Ramphastos bailloni VIEILLOT, Nouv. Dict., d'Hist. Nat., XXXIV, 1819, p. 283 (Southeastern Brazil).

Pteroglossus bailloni GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 20 and text; *Id.*, ed. 2, 1854, pl. 41 and text.

Andigena bailloni SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 136.

Range: Southeast Brazil.

1: "Brazil."

Genus **PTEROGLOSSUS** Illiger.

Pteroglossus Illiger, Prodr. Syst. Mamm. et Aves, 1811, p. 202 (Type *Ramphastos aracari* Linnæus).

***Pteroglossus aracari aracari** (*Linnæus*). BLACK-NECKED ARACARI.

Ramphastos aracari LINNÆUS, Syst. Nat. ed. 1, 1758, p. 104 ("Brazil"); WIED, Beitr. Naturg. Bras., IV, 1831, p. 283; crit. DESCOURTILZ, Orn. Bras., 1852, pl. 14, fig. 1; HELLMAYR, Nov. Zool., XII, 1905, p. 300 (Pará); *Id.*, XIII, 1906, p. 380 (Distr. Pará); *Id.*, XVII, 1910, p. 397 (Borba; Rio Madeira; Rio Tapajos, etc.).

Pteroglossus wiedi STURM, Mon. Ramphastidæ, 1847, pt. 4; GOULD, Mon. Ramphastidœ, ed. 2, 1854, pl. 16 and text; PELZELN, Orn. Bras., 1864, p. 235; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 139.

Pteroglossus aracari aracari HELLMAYR, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Range: Brazil (from north coast to Rio de Janeiro).

1: Brazil ("Faz Cajoa").

***Pteroglossus aracari atricollis** (*P. L. S. Müller*).[b] NORTHERN BLACK-NECKED ARACARI.

[a] *Andigena nigrirostris occidentalis* CHAPMAN: Similar to *A. n. spilorhynchus* (GOULD), "but with the red area at the base of the bill larger on the maxilla and crossing the base of the mandible."

[b] *Pteroglossus aracari atricollis* (MÜLLER): Differs from *P. a. aracari* from Brazil by the broad (instead of narrow) longitudinal black band on the ridge of the culmen and paler yellow (not sulphur yellow) of breast and abdomen.

Ramphastos atricollis P. L. S. MÜLLER, Syst. Nat. Suppl., 1776, p. 83 (ex Buffon, Daubenton, Pl. Enl., 166-"Brazil", *errore* = Cayenne)[a].

Pteroglossus aracari atricollis BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, 102 (Suapure, Orinoco R.); BERLEPSCH, Nov. Zool., XV, 1908, p. 281 (Cayenne); HELLMAYR, Nov. Zool., XX, 1913, p. 227, footnote; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 55 (Paramaribo, Surinam).

Pteroglossus roraimæ BRABOURNE and CHUBB, Ann. & Mag. Nat. Hist., (8), X, 1912, p. 261 (Mt. Roraima, British Guiana); CHUBB, Bds. Brit. Guiana, I, 1916, p. 458.

Pteroglossus aracari roraimæ STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 199 (Guinipa; Vagre R., and Cariaquito, northeastern Venezuela); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, 1916, p. 319.

Range: The Guianas and eastern Venezuela.

5: British Guiana (Tacuteo River 1, Potaro 2, "British Guiana" 1; Surinam (near Paramaribo) 1.

Pteroglossus formosus[b] *Cab.* BEAUTIFUL ARACARI.

Pteroglossus formosus CABANIS, Journ. für Ornith., 1862, p. 332 (Venezuela); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 139; BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 158, No. 1545.

Range: Venezuela.

***Pteroglossus pluricinctus** *Gould.* MANY-BANDED ARACARI.

Pteroglossus pluricinctus GOULD, Proc. Zool. Soc. Lond., 1835, p. 157 ("Brasilia"); *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 15; *Id.*, ed. 2, 1854, pl. 17 and text; STURM, Mon. Ramphastidæ, pt. II, pl. 3; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 139; GOODFELLOW, Ibis, 1902, p. 216 (Ecuador); BERLEPSCH and HARTERT, Nov. Zool., 1902, p. 101 (Munduapo, Orinoco region); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull. II, No. 6, 1916, p. 318 (Munduapo, Venezuela); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 332, pl. XXXVIII, fig. 8 (La Morelia; Villavicencio, Colombia).

Range: Northern Brazil, Venezuela, Colombia, eastern Ecuador and Peru.

1: "Colombia".

***Pteroglossus castanotis castanotis** *Gould.* CHESTNUT-EARED ARACARI.

Pteroglossus castanotis GOULD, Proc. Zool. Soc. Lond., 1833, p. 119 ("Brasilia"); *Id.*, Mon. Ramphastidae, ed. 1, 1834, pl. 13; *Id.*, ed. 2, 1854, pl. 19 and text; SCLATER, Cat. Bds. Brit., Mus., XIX, 1891, p. 140, part; GOODFELLOW, Ibis, 1902, p. 216; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 332, pl. XXXVII, fig. 7 (Villavicencio, Colombia).

[a] Type locality substituted by Berlepsch and Hartert (*l. c.*, 1902). See also Bangs and Penard (*l. c.*).

[b] I have not seen this species.

Range: Northwestern Brazil, Ecuador, northern Peru and Colombia.

2: Peru (Lower Huallaga).

Pteroglossus castanotis australis *Cass.* CASSIN'S ARACARI.

Pteroglossus castanotis b. australis CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 112 (Rio Paraná).

Pteroglossus castanotis australis HELLMAYR, Nov. Zool., XV, 1908, p. 84; *Id.*, XVII, 1910, p. 397 (Calama, etc., Rio Madeira); CHUBB, Ibis, 1910, p. 276 (Paraguay); DABBENE, Bol. Soc. Physis, I, 1914, p. 322 (Missiones, northeastern Argentina).

Pteroglossus castanotis VON IHERING, Revis. Mus. Paulista, VI, 1904, p. 335 (Paraguay).

Pteroglossus attalorhynchus BERTONI, Aves. Nuev. Paraquay, 1901, p. 29 (Paraguay).

Range: Paraguay, northeastern Argentina, eastern Bolivia, and Brazil (north to the Amazon River).

***Pteroglossus torquatus torquatus** (*Gmel.*). COLLARED ARACARI.

Ramphastos torquatus GMELIN, Syst. Nat., I, 1788, p. 354 (Venezuela = Central America).

Pteroglossus torquatus STURM, Mon. Ramphastidæ, 1840, pl. 12; GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 20 and text; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 141.

Pteroglossus torquatus torquatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 343; Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 258, crit. life coloration of bill and bare skin of face (Gatun, Panama Canal Zone).

Range: Mexico (except Yucatan and Campeche) to Panama; Colombia?

†21: Mexico 3; Guatemala 4; Nicaragua (San Gerónimo) 8; Costa Rica (Guayabo) 4; Panama 2.

***Pteroglossus torquatus nuchalis** (*Cabanis*). CABANIS' ARACARI.

Pteroglossus nuchalis CABANIS, Journ. für Ornith., 1862, p. 332 (Porto Cabello, "New Grenada" = Venezuela).

Pteroglossus torquatus nuchalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 341, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 332, pl. XXXVIII, fig. 6, crit. (Puerto Valdivia; Puerto Berrio; Malena; west of Honda, Colombia).

Range: Venezuela and Colombia.

2: Venezuela (Empelado Savanna, east of Maracaibo, 1; Encontrados, Zulia 1).

***Pteroglossus torquatus erythrozonus** *Ridgway.* YUCATAN ARACARI.

Pteroglossus torquatus erythrozonus RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 88 (Temax, Yucatan); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 345.

Range: Yucatan and Campeche, Mexico.

1: Yucatan.

***Pteroglossus frantzii** *Cabanis*. FRANTZIUS' ARACARI.

Pteroglossus frantzii CABANIS, "Sitz. Nat. Ges. Freunde, Berlin, 1861" (Aquacate, western Costa Rica); *Id.*, Journ. für Ornith., 1862, p. 333 (Aquacate); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 142; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 557; BANGS, Proc. N. E. Zool. Club, III, 1902, p. 32 (Boquete, Chiriqui); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 345.

Range: Western Costa Rica and western Panama; "northwestern Colombia"?[a]

2: Costa Rica (Boruca 1, Rio Matina 1).

***Pteroglossus erythropygius** *Gould*. RED-RUMPED ARACARI.

Pteroglossus erythropygius GOULD, Proc. Zool. Soc. Lond., 1843, p. 15 (no locality given)[b]; *Id.*, Voyage of the "Sulphur", Zool., 1844, p. 45, pl. 28 ("Realejo, Nicaragua")[c]; *Id.*, Mon. Ramphastidæ, ed. 2, 1854, pl. 21 (lower fig.)- and text; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 143 (Santa Rita; Intac; Pallatanga, western Ecuador).

Range: Western Ecuador.

1: Ecuador (San Juan, near Huigra).

***Pteroglossus sanguineus** *Gould*. RED ARACARI.

Pteroglossus sanguineus GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 21 (upper fig.) and text (no locality=San José, western Colombia, by designation)[d]; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 143; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 347, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 333 (Salaqui; Alto Bonito; Bagado; Baudo; Novita; Noanama; San José; Los Cisneros; Barbacoas; Buenavista; Narina, western Colombia).

Pteroglossus erythropygius sanguineus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1201 (Noanama).

Range: Northwestern and western Colombia and northwestern Ecuador.

1: "Ecuador."

Pteroglossus bitorquatus bitorquatus *Vigors*. DOUBLE-COLLARED ARACARI.

Pteroglossus bitorquatus VIGORS, Zool. Journ., II, 1826, p. 481 ("Guiana"); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 16 and text; *Id.*, ed. 2, 1854, pl. 26; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 144; GOELDI, Alb.

[a] *Cf.* Ridgway, *l. c.*, p. 341, in key.

[b] I suggest western Ecuador.

[c] *Cf.* Sclater, *l. c.*

[d] Chapman, *l. c.*

Aves Amazon, pt. I, 1900, pl. 12, fig. 4; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 224 (Pará; Benevideo, etc.).

P[teroglossus] bitorquatus bitorquatus HELLMAYR, Nov. Zool., XVII, 1910, p. 399. in text (Pará; Ourem, etc.).

Range: Northeastern Brazil.

Pteroglossus bitorquatus reichenowi[a] *Snethlage.* REICHENOW'S ARACARI.

Pteroglossus reichenowi SNETHLAGE, Orn. Monatsb., XV, 1907, p. 195 ("Monte Allegre," Lower Amazon Region); *Id.*, Bol. Mus. Goeldi, VIII, 1914, p. 224 (Rio Tocantins, etc.).

Pteroglossus bitorquatus reichenowi HELLMAYR, Nov. Zool., XVII, 1910, p. 398, in text (Santarem; Monte Alegre; Cameta; Rio Jamauchim).

Range: Lower Amazon Region, Rio Tocantins (Cameta), Rio Jamauchim, etc.

Pteroglossus bitorquatus sturmii (*Natterer*). STURM'S ARACARI.

Pteroglossus sturmii NATTERER in Sturm's Mon. Ramphastidæ, 1842, III, p. 3, pl. 7 (Borba, Brazil); GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 27; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 144.

Pteroglossus bitorquatus sturmii HELLMAYR, Nov. Zool., XVII, 1910, p. 398 (Calama; Borba; Rio Madeira; Rio Machados).

Range: Northwestern Brazil (Rio Madeira region).

***Pteroglossus flavirostris flavirostris** *Fraser.* YELLOW-BILLED ARACARI

Pteroglossus flavirostris FRASER, Proc. Zool. Soc. Lond., 1840, p. 61, ("Rio Janeiro"); *errore* = Rio Solimoes, northern Brazil)[b]; GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 29 and text; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 144; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 101 (Munduapo and Nericagua, Orinoco region); BERLEPSCH, Nov. Zool., XV, 1908, p. 281, Oyopoc, Cayenne).

P[teroglossus] f[lavirostris] flavirostris HELLMAYR, Nov. Zool., XIV, 1907, p. 83, in text, crit. (Geog. dist.).

Pteroglossus flavirostris flavirostris CHAPMAN, Bull. Am. Mus. Nat. Hist., XXVI, 1917, p. 333 (La Morelia and Florencia, Colombia; Mt. Duida, southwestern Venezuela and La Union, Caura R., Venezuela).

Range: North Brazil (region of Rio Negro; Rio Solimoes, etc.), Venezuela, Colombia and Ecuador.

2: Colombia.

[a] *Pteroglossus bitorquatus reichenowi* SNETHLAGE: Differs from *P. b. bitorquatus* in lacking the yellow jugular band and by the encroachment of the blackish white tooth border serrations on a part of the lower mandible (extending from the upper mandible).

[b] Substituted by Berlepsch and Hartert, *l. c.* 1902, p. 101.

Pteroglossus flavirostris mariæ[a] (*Gould*). MARIA'S YELLOW-BILLED ARACARI.

Pteroglossus mariæ GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 30 and text (no locality = Peruvian Amazons, by substitution)[b].

Pteroglossus flavirostris mariæ HELLMAYR, Nov. Zool., XIV, 1907, p. 83 (Teffe, Rio Solimoes, etc.); *Id.*, p. 399 (Humaytha, Rio Madeira); *Id.*, XVII, 1910, p. 399.

Range: Upper Amazon region in northwestern Brazil and eastern Peru.

Pteroglossus azaræ (*Vieillot*). AZARA'S BANDED ARACARI.

Ramphastos azaræ VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXIV, 1819, p. 282 ("Bresil").

Pteroglossus azaræ GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 28 and text; FRASER, Proc. Zool. Soc. Lond., 1840, p. 60; CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 114; TACZANOWSKI, Orn. Pérou, III, 1886, p. 149; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 145; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 225.

Range: Northwestern Brazil (Rio Negro) and Peru.

Pteroglossus humboldti *Wagler*. HUMBOLDT'S ARACARI.

Pteroglossus humboldti WAGLER, Syst. Av. 1827, (*Pteroglossus*) sp. 4 ("Brasilia"); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 22; *Id.*, ed. 2, 1854, pl. 22 and text; PELZELN, Orn. Bras., 1871, p. 237; SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1866, p. 195 (Ucayali, Peru); *Id.*, 1867, p. 753; *Id.*, 1873, p. 297 (E. Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 149; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 146 (Nauta; Rio Javari, Upper Ucayali; Sarayacu; Elvira; Yqutos; Chayavetas in western Brazil; Peru, and Andoa, Ecuador); HELLMAYR, Nov. Zool., XIV, 1907, p. 83 (Teffe, Rio Solimoes); *Id.*, XVII, 1910, p. 400 (Calama, Rio Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 225 (Rio Purús); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 333 (Morelia, Colombia).

Range: Northwestern Brazil, eastern Peru, Ecuador and southeastern Colombia.

***Pteroglossus inscriptus** *Swainson*. LETTERED ARACARI.

Pteroglossus inscriptus SWAINSON, Zool. Illust., II, 1822, p. 90 ("Guayana" = Para)[c]; GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 23 and text; *Id.*, ed. 2, 1854, pl. 23; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 146; GOELDI, Alb. Aves Amazon, pt. 1, 1900, pl. 12, fig. 2; HELLMAYR, Nov. Zool., XVII, 1910, p. 399, crit. (Borba, Rio Madeira); PELZELN, Orn. Bras., 1871, p. 236 (Mat-

[a] *Pteroglossus flavirostris mariæ* (GOULD): Whole under mandible ochraceous brown (not mostly yellowish as in *P. f. flavirostris*).

[b] Hellmayr, *l. c.*, 1907, p. 83.

[c] Type locality as designated by Hellmayr, *l. c.*, 1910, p. 399.

to Grosso; Rio Guapare; Rio Madeira, etc.); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 225 (Pará; Rio Guamá; Rio Moja; Rio Tocantins; Rio Tapajoz, etc.).

Pteroglossus inscriptus inscriptus HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 69 (crit; dist.); *Id.*, p. 95 (Pará District).

Range: Northern Brazil.

2: Brazil (Utin, lower Amazon River, near Santarem).

***Pteroglossus viridis** (*Linn.*). GREEN ARACARI.

Ramphastos viridis LINNÆUS, Syst. Nat., ed. 12, 1766, p. 150 (Cayana).

Pteroglossus viridis GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 21; *Id.*, ed. 2, 1854, pl. 24; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 147; GOELDI, Alb. Aves, Amazon, pt. 1, 1900, pl. 12, fig. 3; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 101 (La Union, Caura R. and Suapure, Orinoco Region, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 81 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 459; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 56 (localities in Surinam).

Range: Guiana, Venezuela and northern Brazil.

6: British Guiana (Hyde Park 2, Mazaruni R. 2); Surinam (near Paramaribo) 2.

Pteroglossus didymus *Sclater*. SCLATER'S ARACARI.

Pteroglossus didymus SCLATER, Proc. Zool. Soc. Lond., 1890, p. 403, pl. VI (Upper Amazons); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 226.

Range: Upper Amazon region, eastern Peru.

Genus **BAUHARNAISIUS** Bonaparte

Bauharnaisius Bonaparte, Consp. Av., 1850, p. 95 (Type *Pteroglossus beauharnaisi* Wagler); Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 330

Bauharnaisius beauharnaisi (*Wagler*). CURL CRESTED ARACARI.

Pteroglossus beauharnaisi WAGLER, Isis, 1832, p. 280 ("Brasilia, prov. Pará")[a]; Gould, Mon. Ramphastidæ, ed. 2, 1854, pl. 25 and text; TACZANOWSKI, Orn. Pérou, III, 1886, p. 152; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 148 (Chamicuros; Santa Cruz; Chayavetas; Xeveros); HELLMAYR, Nov. Zool. XIV, 1907, p. 399 (Humaytha, Rio Madeira, western Brazil); *Id.*, XVII, 1910, p. 400 (Calama; Jamerysinho, Rio Madeira, Brazil)[b]; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 222 (Rio Purús).

(?) *Pteroglossus poeppigii* WAGLER, Isis, 1832, p. 1230.

Pteroglossus ulocomus GOULD, Proc. Zool. Soc. Lond., 1833, p. 38; *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 18 and text.

Range: Eastern Peru (Upper Amazon Region) and western Brazil (Rio Purús[c] and upper Rio Madeira).[d]

[a] I designate Upper Amazon region, eastern Peru.

[b] According to Hellmayr specimens from the Rio Madeira differ from the type specimen in the almost total absence of brown spots on the cheeks and throat.

[c] Snethlage, *l. c.*

[d] Hellmayr, *l. c.*

Genus **SELENIDERA** Gould.

Selenidera Gould, Icon. Av., pt. 1, pl. 7 and text (Type *Pteroglossus gouldii* Natt.).

***Selenidera maculirostris maculirostris** (*Licht.*). SPOTTED-BILLED TOUCANET.

Pteroglossus maculirostris LICHT., Vers. Doubl., p. 7, 1823 (Brasil); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 24; STURM, Mon. Ramphastidæ, pt. 1, pl. 7.
Selenidera maculirostris SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 149.

Range: Southeastern Brazil.

1: "Brazil."

Selenidera maculirostris gouldii (*Natterer*). GOULD'S TOUCANET.

Pteroglossus gouldii NATTERER, Proc. Zool. Soc. Lond., 1837, p. 44 (Pará).
Selenidera gouldii GOULD, Mon. Ramphastidæ, ed. 2, 1854, p. 32; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 150; GOELDI, Alb. Aves Amazon, pt. 1, 1900, p. 12, fig. 5.
Selenidera maculirostris gouldii HELLMAYR, Nov. Zool., XVII, 1910, p. 400, crit. (Borba, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).
Selenidera gouldi SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 226 (Pará; Rio Mojo; Rio Tocantins; Rio Tapajos, etc.).

Range: Northern Brazil.

Selenidera langsdorffi (*Wagl.*). LANGSDORFF'S TOUCANET.

Pteroglossus langsdorffi WAGLER, Syst. Av. Pteroglossus, 1827, sp. 12 ("Brasilia").
Selenidera langsdorffi GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 33; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 150; HELLMAYR, Nov. Zool., XIV, 1907, p. 84 (Teffe); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 227.

Range: Eastern Peru.

Selenidera reinwardti (*Wagl.*). REINWARDT'S TOUCANET.

Pteroglossus reinwardti WAGLER, Syst. Av., Pteroglossus 1827, sp. 11 ("Brasilia").
Selenidera reinwardti GOULD, Mon. Ramphastidæ, ed. 2, 1854. pl. 35; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 151; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 227; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 334 (La Morelia; Florencia, southeastern Colombia).

Range: Eastern Peru, Ecuador and southeastern Colombia.

Selenidera nattereri (*Gould*). NATTERER'S TOUCANET.

Pteroglossus nattereri GOULD, Proc. Zool. Soc. Lond., 1835, p. 157 ("Brasilia"); *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 25 and text.
Selenidera nattereri GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 34; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 151; BERLEPSCH, Nov. Zool., XV, 1908, p. 282 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 461; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 227.

Range: Guianas, Venezuela and northwestern Brazil.

***Selenidera culik** (*Wagl.*). GUIANA TOUCANET.

Pteroglossus culik WAGLER, Syst. Av. Pteroglossus, 1827, sp. 10 (Cayenne).
Pteroglossus piperivorus (*nec* Linnæus) CABANIS in Schomb. Reis. Guiana, III, 1848, p. 721 (Canuku Mts.); Descourtilz, Orn. Bras., 1852, pl. 13, fig. 2.
Selenidera piperivora GOULD, Mon. Ramphastidæ, ed. 2, 1854, p. 36; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 152.
Selenidera culik CHUBB, Bds. Brit. Guiana, I, 1916, p. 460; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 227; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 56 (Paramaribo, Surinam).

Range: British Guiana and northeastern Brazil.

2: British Guiana.

***Selenidera spectabilis** *Cassin.* CASSIN'S TOUCANET.

Selenidera spectabilis CASSIN, Proc. Acad. Nat. Sci. Phila., 1857, p. 214 (Cocuyos de Veragua, Panama); *Id.*, Journ. Acad. Nat. Sci. Phila., IV, 1858, p. 5, pl. 1; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 153; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 558 (Nicaragua; Costa Rica; Panama and Rio Truando, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 349; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 334 (Baudo and La Frijolera, Colombia).

Range: Nicaragua, Costa Rica, Panama and northwestern Colombia.

2: Nicaragua (San Raphael, Del Monte 1); Panama 1.

Genus **AULACORHYNCHUS** Gould.

Aulacorhynchus Gould, Proc. Zool. Soc. Lond., 1834, p. 147 (Type *Pteroglossus sulcatus* Swainson); Hellmayr, Nov. Zool., XX, 1913, p. 147.

Aulacorhynchus sulcatus sulcatus (*Swainson*). GROOVE-BILLED TOUCANET.

Pteroglossus sulcatus SWAINSON, Quart. Journ. Sci. Litt. and Arts, IX, 1820, p. 267 ("New Spain" = Venezuela); *Id.*, Zool. Illustr., I, 1821, pl. 44 (Spanish Main); GOULD, Mon. Ramphastidæ, ed. 1, 1834, pl. 31 and text.
Aulacorhamphus sulcatus CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 118 (Caracas, Venezuela); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 154, part.[a]
Aulacorhamphus sulcatus sulcatus HELLMAYR and SEILERN, Arch. für Naturg., Ab. A, 5 Heft, 1912, p. 157, crit.

Range: Andes of Coast region of northwestern Venezuela.

***Aulacorhynchus sulcatus erythrognathus** (*Gould*). RED-BILLED GREEN TOUCANET.

Aulacorhynchus erythrognathus GOULD, Ann. & Mag. Nat. Hist., (4) XIV, 1874, p. 184 (Caripe, Venezuela).

[a] *Cf.* Hellmayr and Seilern, *l. c.*

A[ulacorhamphus] s[ulcatus] erythrognathus HELLMAYR and SEILERN, Arch. für Naturg. Ab. A, 5 Heft, 1912, p. 157, in text, crit.

Aulacorhamphus erythrognathus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 154, pl. VII.

Range: Andes of northeastern Venezuela (State of Bermudez)[a].

1: "Venezuela."

Aulacorhynchus calorhynchus (*Gould*). COLOMBIAN TOUCANET.

Aulacorhamphus calorhynchus GOULD, Ann. & Mag. Nat. Hist., (4), XIV, 1874, p. 183 (Merida); SALVIN and GODMAN, Ibis, 1879, p. 206 (Colombia); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 155, pl. VIII; ALLEN, Bull. Am. Mus. Nat. Hist., XIII, 1900, p. 133 (Valparaiso, Colombia); BANGS, Proc. Biol. Soc. Wash., XII, 1899, p. 172 (Palomina, etc., Colombia); *Id.*, p. 158 (Pueblo Viejo, Colombia).

Range: Western Venezuela and Colombia.

***Aulacorhynchus derbianus** (*Gould*). EARL OF DERBY'S TOUCANET.

Pteroglossus derbianus GOULD, Mon. Ramphastidæ, ed. 1, 1834 pl. 32; STURM, ed. Gould's Mon. Ramphastidæ, 1841, pt. II, pl. 9.

Aulacorhynchus derbianus GOULD, Proc. Zool. Soc. Lond., 1835, p. 49 ("Cordillerrian Andes").

Aulacoramphus derbianus GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 43 and text; SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1879, p. 634 (Bolivia); BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1885, p. 116 (Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 158; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 155.

Range: Ecuador, Peru and Bolivia.

1: Peru (Chunchamayo).

Aulacorhynchus whitelyanus (*Salvin and Godman*). WHITELY'S TOUCANET.

Aulacorhamphus whitelyanus SALVIN and GODMAN, Ibis, 1882, p. 83 (Merumé Mts.); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 156, pl. IX; CHUBB, Bds. Brit. Guiana, I, 1916, p. 462.

Range: British Guiana.

***Aulacorhynchus prasinus prasinus** (*Gould*). EMERALD TOUCANET.

Pteroglossus prasinus GOULD, Proc. Zool. Soc. Lond., 1834, p. 78 (Mexico); *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 29.

Pteroglossus pavoninus (nec Gmelin) WAGLER, Isis, 1829, p. 507 (Mexico).

Aulacorhamphus prasinus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 156.

Aulacorhynchus prasinus prasinus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 355.

[a] HELLMAYR and SEILERN state that true *A. s. erythrognathus* is known only from the Andes in the State of Bermudez, Venezuela.

Range: Guatemala and Mexico (State of Vera Cruz).

3: Mexico 1, and Guatemala (Tecpam) 2.

***Aulacorhynchus prasinus virescens** *Ridgway*. SOUTHERN EMERALD TOUCANET.

Aulacorhynchus prasinus virescens RIDGWAY, Proc. Biol. Soc. Wash., 1912, p. 88 (Chasniguas, Honduras); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 357.

Range: Honduras and northern Nicaragua.

2: Nicaragua (San Raphael del Monte).

Aulacorhynchus wagleri (*Sturm*). WAGLER'S TOUCANET.

Pteroglossus wagleri STURM, ed. Gould's Mon. Ramphastidæ, 1841, pl. 16 (heft 2, pl. 6).

Aulacoramphus wagleri GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 48 and text.

Aulacorhamphus wagleri SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 157; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 560.

Aulacorhynchus wagleri RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 354.

Aulacorhynchus prasinus wagleri HELLMAYR, Nov. Zool., XX, 1913, p. 255, crit.

Range: Southwestern Mexico.

Aulacorhynchus albivitta albivitta (*Boissonneau*). WHITE-THROATED TOUCANET.

Pteroglossus albivitta BOISSONNEAU, Rev. Zool., 1840, p. 70 (Bogotá).

Aulacoramphus albivitta GOULD, Mom. Ramphastidæ, ed. 2, 1854, pl. 49 and text; WYATT, Ibis, 1871, p. 380 (Alto; Portreras).

Aulacorhamphus albivittatus SCLATER, Proc. Zool. Soc. Lond., 1858, p. 75 (Ecuador); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 157, part (Bogotá; Merida, Venezuela; Ecuador); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 640, in text, crit.; *Id.*, XXXVI, 1917, p. 334, pl. XXXVIII, fig. 5 (El Eden; La Palma; Andelucia; Aguadita; Subia; Palo Hueco, Colombia).

Range: Eastern Andes and eastern slope of central Andes, Colombia; western Venezuela,[a] and Ecuador.[b]

Aulacorhynchus albivitta phæolæmus (*Gould*). GRAYISH-BLUE THROATED TOUCANET.

Aulacorhamphus phæolæmus GOULD, Ann. & Mag. Nat. Hist., (4), XIV, 1874, p. 184 ("Colombia and Venezuela" = Concordia, Antioquia, western Colombia.)[c].

Aulacorhamphus albivitta phæolæmus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1213, in text.

[a] *Cf.* Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1213, footnote.

[b] I have not seen specimens from Ecuador. The three forms which occur in Colombia may be readily distinguished by the color of the throat.

1. *A. a. albivitta*, throat grayish white or whitish.
2. *A. a. griseigularis*, throat gray.
3. *A. a. phæolæmus*, throat bluish gray or grayish blue.

[c] *Cf.* Hellmayr, Proc. Zool. Soc. Lond., 1911, p. 1213, footnote.

Aulacorhynchus albivitta phæolæmus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 334 (San Antonio; Cerro Munchique; Florida; Cocal, Colombia).

Aulacorhamphus petax BANGS, Proc. Biol. Soc. Wash., XXI, 1908, p. 158 (San Antonio, Colombia).

Range: Subtropical zone of the western Andes, Colombia (except at the northern end).[a]

***Aulacorhynchus albivitta griseigularis**[b] *Chapman.* PLUMBEOUS-THROATED TOUCANET.

Aulacorhynchus albivitta griseigularis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 639 (Santa Elena, alt. 9000 ft., central Andes, Antioquia, Colombia); *Id.*, XXXVI, 1917, p. 335 (Paramillo; Sta. Elena; Salento; Miraflores, Colombia).

Range: Western slope of central Andes and northern end of western Andes, Colombia.

2: Colombia (Antioquia).

Aulacorhynchus lautus[c] (*Bangs*). SANTA MARTA TOUCANET.

Aulacorhamphus lautus BANGS, Proc. Biol. Soc. Wash., XII, 1898, p. 173 (San Miguel, Santa Marta region, Colombia).

[*Aulacorhynchus*] *lautus* CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 640, in text, crit.

Range: Santa Marta region, northern Colombia.

***Aulacorhynchus hæmatopygius** (*Gould*). CRIMSON-RUMPED TOUCANET.

Pteroglossus hæmatopygius GOULD, Proc. Zool. Soc. Lond., 1834, p. 147, (no locality given = Colombia?)[d]; *Id.*, Mon. Ramphastidæ, ed. 1, 1834, pl. 33 and text.

Aulacoramphus hæmatopygius GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 45 and text; SCLATER, Proc. Zool. Soc. Lond., 1859, p. 146 (Ecuador); CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 119; SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1879, p. 537 (Concordia, Antioquia); BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1884, p. 308 (western Ecuador); SCLATER,

[a] Chapman, *l. c.*

[b] *Aulacorhynchus albivitta griseigularis* CHAPMAN: Similar to *A. a. phæolæmus* (GOULD), but throat gray with a faint bluish instead of deep grayish blue. It differs from *A. a. albivitta* by the strongly colored throat (not whitish as in *albivitta*) and absence of reddish tinge at tip of mandible, etc.

[c] *Aulacorhynchus lautus* (BANGS): Belongs in the group having the rectrices tipped with chestnut; in the color of the throat it is close to *A. a. griseigularis* CHAPMAN, but differs in having the maxilla more sulcate, the black at the base much more extensive and the basal portion of the bill bordered by yellowish. From *cæruleogularis* of Panama and Costa Rica it differs in the lighter and less bluish throat, absence of a chestnut spot at base of the yellow maxillary stripe, etc. "Wing, 124; tail, 108.8; exposed culmen, 69.6" (BANGS).

[d] I suggest Concordia, Antioquia, Colombia.

Cat. Bds. Brit. Mus., XIX, 1891, p. 158 (Colombia and Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 161 (no records, description from specimen from Ecuador); GOODFELLOW, Ibis, 1902, p. 217 (western Ecuador).

(?) *Pteroglossus castaneorhynchus* GOULD, Ann. Nat. Hist., IX, 1842, p. 238 (Peru?; Bogotá?)[a].

(?) *Aulacorhamphus castaneorhynchus* GOULD, Mon. Ramphastidæ, ed. 2, pl. 44 and text; CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 119, crit.

Aulacorhynchus haematopygius CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 335 (various localities in the subtropical zone in all the three ranges of the Andes in Colombia).

Range: Colombia and Ecuador.

1: "Colombia."

Aulacorhynchus cæruleocinctus *d'Orbigny*. BLUE-BANDED TOUCANET.

Aulacorhynchus cæruleocinctus D'OBIGNY, Voy. Amer. Merid. Ois., 1834-47, p. 382, pl. LXVI, fig. 2 (Bolivia).

Aulacorhamphus cæruleicinctus BONAPARTE, Consp. Av., 1850, p. 96; GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 46 and text; CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 119; SCLATER, Proc. Zool. Soc. Lond., 1873, p. 186 (Peru); *Id.*, 1879, p. 634 (Bolivia); TACZANOWSKI, Orn. Pérou, III, 1886, p. 160; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 159 (Tilotilo and Khapaguaia, Bolivia; Huasampilla, Peru).

Range: Bolivia and Peru.

***Aulacorhynchus cæruleogularis cæruleogularis** (*Gould*). BLUE-THROATED TOUCANET.

Aulacorhamphus cæruleogularis GOULD, Proc. Zool. Soc. Lond., 1854, p. 45 (Veragua, Panama).

Aulacoramphus cæruleogularis GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 51 and text; BOUCARD, Proc. Zool. Soc. Lond., 1878, p. 47 (Costa Rica).

Aulacorhamphus cæruleigularis ZELEDON, Anal. Mus. Nac. Costa Rica, I, 1887, p. 123; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 159; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1897, p. 561; BANGS, Proc. N. E. Zool. Club, III, 1902, p. 33 (Boquete, Chiriqui, Panama); FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 266 (Guayabo and Coliblanco, Costa Rica); CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 576, crit. (Costa Rica).

Aulacorhynchus cæruleogularis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 357.

Range: Highlands of Costa Rica and western Panama.

13: Costa Rica (Coliblanco 6, Guayabo 6); Panama (Veragua) 1.

Aulacorhynchus cæruleogularis cognatus (*Nelson*). GOLDMAN'S BLUE-THROATED TOUCANET.

Aulacorhamphus cæruleigularis cognatus NELSON, Smiths. Misc. Coll., LX, No. 3, 1912, p. 4 (Mt. Pirri, head of Rio Limon, alt. 5000 ft., eastern Panama).

[a] *Cf.* Sclater, Cat. Bds. Brit. Mus., XIX, 1891, p. 158, in text.

Aulacorhynchus cæruleogularis cognatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 350.

Range: Southeastern Panama (Mt. Pirri).

Aulacorhynchus cyanolæmus (*Gould*). GRAY-THROATED TOUCANET.

Aulacorhamphus cyanolæmus GOULD, Proc. Zool. Soc. Lond., 1866, p. 24 (Loxa, Ecuador); CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 121.

Aulacorhamphus cyanolæmus SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 160, pl. X (Loxa and San Lucas, Ecuador).

Range: Western Ecuador.

***Aulacorhynchus atrogularis** (*Sturm*). BLACK-THROATED TOUCANET.

Pteroglossus atrogularis STURM, ed. Gould's Mon. Ramphastidæ, ed. 2, 1850, pl. 50 and text (Andes of Peru)[a].

Aulacorhamphus atrogularis GOULD, Mon. Ramphastidæ, ed. 2, 1854, pl. 50; CASSIN, Proc. Acad. Nat. Sci. Phila., 1867, p. 121; TACZANOWSKI, Orn. Pérou, III, 1886, p. 159; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 160; BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 160, No. 1580 (central Peru).

Range: Andes of central Peru.

2: Peru (Chunchamayo).

Aulacorhynchus dimidiatus (*Ridgway*). RIDGWAY'S TOUCANET.

Aulacorhamphus dimidiatus RIDGWAY, Proc. U. S. Nat. Mus. IX, 1886, p. 93 (no type locality); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 160.

Range: Unknown.[b]

[a] I designate Chunchamayo, central Peru, for the type locality.

[b] Only known from two specimens in the U. S. National Museum. They were found attached to a bead belt, the origin of which is unknown, "but it is supposed, judging from the birds, which were suspended from it as ornamental appendages, to have come from some portion of the Upper Orinoco region, in Venezuela, or contiguous portion of the Rio Negro basin." (Ridgway, *l. c.*, p. 92.)

Order PICIFORMES.

Suborder GALBULÆ.

Family GALBULIDÆ. Jacamars, etc.

Subfamily Galbulinæ

Genus **UROGALBA** Bonaparte.

Urogalba Bonaparte, Ateneo Italiano, II, 1854, p. 129 (Consp. Volucr. Zygod., 1854, p. 13) (Type *Alcedo paradisea* Linnæus).

***Urogalba dea dea** (*Linnæus*). PARADISE JACAMAR.

Alcedo dea LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 116 (Surinam).

Alcedo paradisea LINNÆUS, Syst. Nat., ed. 12, 1766, p. 181 (Cayenne).

Galbula paradisea SCLATER, Contr. Orn., 1852, p. 33; DESCOURTILZ, Orn. Bras., 1852, pl. 18, fig. 3.

Urogalba paradisea SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 1, pl. 1, fig. 1; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 162, part; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, pl. 1, figs. 3-4.

Urogalba dea BERLEPSCH, Nov. Zool., XV, 1908, p. 276 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 229 (Manaos); CHUBB, Bds. Brit. Guiana. I, 1916, p. 464; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 324 (Boca de Sina, Cunucunuma R., Upper Orinoco).

Urogalba dea dea HELLMAYR, Nov. Zool., XIV, 1907, p. 28, in text (Iquitos).

Range: The Guianas, Venezuela and northern Brazil (north of the Amazon R.).

9: British Guiana (Demerara R., 1, Potaro 6); Surinam, 1; "South America" 1.

***Urogalba dea amazonum** *Sclater*. SOUTHERN PARADISE JACAMAR.

Urogalba amazonum SCLATER, Proc. Zool. Soc. Lond., 1855, p. 14 (Pará)[a]; *Id.*, Mon. Jacamars and Puff-birds, 1880, p. 5, pl. 1, fig. 2; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 163; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 3; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 229 (Pará; Maguary; Rio Guamá; Rio Acara; Rio Tocantins; Rio Tapajos).

Urogalba paradisea amazonum TACZANOWSKI, Orn Pérou, III, 1886, p. 119.

[a] Originally described from Pará, but the correctness of this locality was doubted by Sclater, who suggested substituting "Upper Amazonia" (*cf.* Mon. Jacamars and Puff-birds, 1880, p. 6). However, specimens have been taken near Pará and Hellmayr considers the change undesirable (*cf.* Nov. Zool., XIV, 1907, p. 27).

Urogalba dea amazonum HELLMAYR, Nov. Zool., XIV, 1907, p. 27 (south bank of the Amazon, Pará; Santarem; Ega); *Id.*, 1907, p. 401 (Humaytha, Rio Madeira, western Brazil); *Id.*, 1910, p. 388 (Sta. Isabel, Rio Preto); *Id.*, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Brazil (region south of the Amazon), eastern Peru and northern Bolivia.

1: Bolivia (Porto Velho).

Genus GALBULA Brisson.

Galbula Brisson, Orn., IV, 1760, p. 85 (Type by tautonomy, *Alcedo galbula* Linnæus).

Caucalias Cabanis and Heine, Mus. Hein., IV, heft 1, 1863, p. 218 (Type *Galbula leucogastra* Vieillot).

*Galbula galbula (*Linnæus*). COMMON JACAMAR.

Alcedo galbula LINNÆUS, Syst. Nat., I, ed. 12, 1766, p. 182 ("Brasilia, Cayania" = Cayenne).

Galbula viridis LATHAM, Index Orn., 1790, p. 245; SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 7, pl. 2; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 164; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, pl. 1, fig. 5; DESCOURTILZ, Orn. Bras., 1852, pl. 18, fig. 2.

Galbula viridicauda SWAINSON, An. in Menag., 1848, p. 327; Cabanis, in Schomb. Reis. Guiana, III, 1848, p. 717.

Galbula galbula BERLEPSCH and HARTERT; Nov. Zool., IX, 1902, p. 103 (Suapure; La Pricion; La Union; Nicare, Orinoco Region); BERLEPSCH, Nov. Zool., XV, 1908, p. 276 (Cayenne); HELLMAYR, Nov. Zool., XVII, 1910, p. 388 (Borba, Rio Madeira, Brazil); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 230 (Rio Tapajos; Rio Jary; Monte Alegre; Rio Maecuri; Obidos; Rio Jamunda, etc., Brazil); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull. 2, No. 6, 1916, p. 325 (Upper Orinoco); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 54 (localities in Surinam).

Range: Guianas, Venezuela, northern and eastern Brazil.

9: Surinam (near Paramaribo) 2; British Guiana (Abay) 2; Brazil (Lower Rio Branco 1, Boa Vista, Rio Branco 3, Conceicão, Rio Branco 1).

*Galbula rufo-viridis *Cabanis*. SPOT-TAILED JACAMAR.

Galbula rufo-viridis CABANIS in Ersch. u. Grub. Enc., sect. 1, III, 1851, p. 308 ("Brasilien"); SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 11, pl. 3; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 165 (Rio Tocantins; Pernambuco; Bahia; Goyaz; Matto Grosso, Brazil, and Bolivia); *Id.*, in Wytsman's Gen. Avium, 1909, pt. 10, p. 4; ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 133 (Matto Grosso); HELLMAYR, Nov. Zool., XV, 1908, p. 87 (Goyaz, Brazil); *Id.*, XVII, 1910, p. 389 (Calama, Rio Madeira); DABBENE, An. Mus. Nac. Buenos Aires, XI, 1910, p. 279 (San Pedro, Missiones, northeastern Argentina); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 230 (Rio Tocantins; Rio Tapajos; Rio Jamauchin; Marajo; Monte Alegre; Maranhão, Brazil).

Galbula maculicauda PELZELN, Orn. Bras., 1871, p. 24 (Rio Paraná, Rio Pardo, Goyaz, etc.).

Range: Brazil, from south of the Amazon to Bolivia, southern Brazil and extreme northeastern Argentina (Missiones); not recorded from Paraguay.

†12: Brazil (São Marcello, Rio Preto, Bahia 6; São Amaro, Bahia 1; Lagoa Santa, Minas Geraes 5).

***Galbula ruficauda ruficauda** *Cuvier.* RUFOUS-TAILED JACAMAR.

Galbula ruficauda CUVIER, Regne Anim., I, 1817, p. 420 ("Colombia"); SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 15, pl. IV; *Id.*, in Wytsman's Gen. Avium, 1909, pt. 10, p. 4; BERLEPSCH, Nov. Zool., XV, 1908, p. 276 (Cayenne); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 199 (Guinipa, Venezuela) CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 325 (Venezuela); CHUBB, Bds. Brit. Guiana, I, 1916, p. 467.

Galbula ruficauda ruficauda CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 336 (Puerto Valdivia; Puerto Berrio; Honda and Chicoral in humid portion of the Lower Cauca and Magdalena Valleys, Colombia).

Galbula leptura CABANIS, in Schomb. Reis. Guiana, III, 1848, p. 717.

Range: Guiana, Tobago, Trinidad, Venezuela and Colombia.

†35: Colombia (Cucuta) 6; Venezuela (Rio Aurare, east of Maracaibo, 5; Maracay, Aragua 8); Tobago Island, 16.

***Galbula ruficauda brevirostris**[a] *Cory.* SHORT-BILLED JACAMAR.

Galbula ruficauda brevirostris CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1913, p. 287 (Encontrados, southwest of Lake Maracaibo, western Venezuela).

Range: So far as known, confined to the low, heavily forested region of Zulia (Encontrados, Catatumbo, etc.), western Venezuela.

†17: Venezuela (Catatumbo 10, Encontrados 7).

Galbula ruficauda pallens[b] *Bangs.* SANTA MARTA JACAMAR.

Galbula ruficauda pallens BANGS, Proc. Biol. Soc. Wash., XII, 1898, p. 133 Santa Marta, Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 336, crit. (Calama, in arid zone on the lower Magdalena River, and Banco, Colombia).

Range: Arid region of northern Colombia.

***Galbula melanogenia** *Sclater.* BLACK-FACED JACAMAR.

Galbula melanogenia SCLATER, Jardine's Contr. Orn., 1852, p. 61, pl. 90 (no locality given = Vera Paz, Guatemala)[c]; *Id.*, Mon Jacamars and Puff-birds, 1880, p. 19, pl. 5; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 166; *Id.*, in Wyts-

[a] *Galbula ruficauda brevirostris* CORY: Similar to *G. r. ruficauda*, but bill decidedly shorter; wing and tail shorter, and color of under parts somewhat darker; wing about 75; tail, 115; bill, 38 to 44 mm. (average 42 mm.).

[b] *Galbula ruficauda pallens* BANGS: Similar to *G. r. ruficauda*, but rufous areas paler; pectoral band narrower and bill longer.

[c] *Cf.* Sclater, Mon. Jacamars and Puff-birds, 1879, p. 19.

man's Gen. Avium, pt. 10, 1909, p. 4; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1906, p. 506; FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 265 (Guayabo, Costa Rica); GOODFELLOW, Ibis, 1902, p. 212 (Santo Domingo, Ecuador); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1194 (western Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 366 (distribution very complete, synonomy, etc.); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 337, crit. (various localities in tropical zone of Pacific coast region of Colombia; Quibdo; Novita; Barbacoas, etc.).

Range: Southeastern Mexico and Guatemala and southward through Central America to Colombia and western Ecuador.

8: Guatemala (Los Amates, Isabel) 5; Costa Rica (Guayabo 1, Buenos Aires 1, Lagarto 1).

***Galbula tombacea tombacea** *Spix*. BLUE-THROATED JACAMAR.

Galbula tombacea SPIX, Av. Bras., I, 1824, p. 55, pl. 58 ("in sylvis fl. Amazonum"); SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 23, pl. VI; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 167; *Id.*, in Wytsman's Gen. Avium, 1909, pt. 10, p. 4; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 601 (Spix's Types).

Galbula fuscicapilla SCLATER, Proc. Zool. Soc. Lond., 1855, pp. 13, 136, pl. 77.

Galbula tombacea tombacea CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 337 (Villavicencio; Buena Vista; La Morelia, Colombia).

Galbula tombacea tombacea HELLMAYR, Nov. Zool., XVII, 1910, p. 389, in text, crit.; *Id.*, Abh. K. Bayer, Akad. Wiss., XXII, 1906, p. 602 (range, etc.).

Range: North bank of the Peruvian Amazons (Iquitos, Pebas, etc.); northwestern Brazil (Rio Javarri, etc.), to eastern slopes of eastern Andes, Colombia.

2: "Colombia."

***Galbula tombacea cyanescens**[a] *Deville*. DEVILLE'S JACAMAR.

Galbula cyanescens DEVILLE, Rev. et Mag. de Zool. (2), I, 1849, p. 56 ("les bords de l'Amazone" = Sarayacu. Ucayali R., eastern Peru).[b]

Galbula tombacea cyanescens HELLMAYR, Nov. Zool., XIV, 1907, p. 402 (Humaytha, Rio Madeira); *Id.*, Abh. K. Bayer, Akad. Wiss., XXII, 1906, p. 602 (La Merced; La Gloria; Marcapata, Peru); *Id.*, Nov. Zool. XVII, 1910, p. 389, crit. (La Merced; La Gloria; Sarayacu; Ucayali; Nauta; Rio Jaura; Humaytha, etc.); MENEGAUX, Bull. Mus. d'Hist. Nat., Paris, 1910, p. 362 (Pina, Peru); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 231 (Bom Lugar; Monte Verde; Ponte Alegre; Rio Purús, western Brazil).

Range: Eastern Peru (south of the Amazons), central and southeastern Peru and northwestern Brazil (Rio Madeira, Rio Purús, etc.).

5: Peru (Moyobamba 3, Rioja 2).

[a] *Galbula tombacea cyanescens* DEVILLE: Similar to *G. t. tombacea*, but differs chiefly in having the whole of the pileum green (not with forehead and front of crown smoky brown as in *G. t. tombacea*).

[b] *Cf.* Hellmayr, Nov. Zool., XVII, 1910, p. 389, footnote.

Galbula tombacea pastazæ[a] (*Taczanowski and Berlepsch*). PASTAZA RIVER JACAMAR.

Galbula pastazæ TACZANOWSKI and BERLEPSCH, Proc. Zool. Soc. Lond., 1885, p. 107 (Ecuador); SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 168, (Mapoto, Ecuador); *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 5, pl. 1, figs. 1-2; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 602 (Mapoto; Machay; Ambato, eastern Ecuador).

Range: Ecuador.

Galbula cyaneicollis *Cassin.* PURPLE-NECKED JACAMAR.

Galbula cyaneicollis CASSIN, Proc. Acad. Nat. Sci. Phila., V, 1851, p. 154, pl. 7 (Pará); SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 31, pl. VIII; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 169; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 5; HELLMAYR, Nov. Zool., XII, 1905, p. 296 (Pará); *Id.*, XIII, 1906, p. 380 (Prata, Pará); *Id.*, XIV, 1907, crit. (Humaytha, Rio Madeira); *Id.*, XVII, 1910, p. 390 (Calama, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District); SNETHLAGE, Journ. für Ornith., 1908, p. 20, crit.; *Id.*, Bol. Mus. Goeldi, VIII, 1914, p. 231 (Pará; Rio Gaumá; Rio Tocantins; Rio Xingu; Rio Iriri; Cussary; Rio Tapajoz; Rio Jamauchim, etc. Brazil).

Galbula cyanopogon CABANIS, in Ersch. u. Grub. Enc., sect. I, III, 1851, p. 308.

Range: Northern and northeastern Brazil from Pará westward to the Madeira,[b] Jaura and Purús Rivers.

***Galbula leucogastra leucogastra** *Vieillot.* WHITE-BELLIED JACAMAR.

Balbula leucogastra VIEILLOT, Nouv. Dict. d'Hist. Nat., XVI, 1817, p. 444 ("Amerique meridionale" = Cayenne)[c]; SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 33, pl. IX; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 170; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 5; BERLEPSCH, Nov. Zool., XV, 1908, p. 277 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 232 (Rio Maecuru); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 54 (Surinam).

Galbula albiventris CUVIER, Régne Anim., I, 1829, p. 448.

Caucalias leucogaster CABANIS and HEINE, Mus. Hein., IV, 1863, p. 218.

Galbula albiventer SWAINSON, Anim. in Menag., 1838, p. 328; CABANIS in Schomb. Reis. Guiana, III, 1848, p. 717.

Galbula leucogaster CHUBB, Bds, Brit. Guiana, I, 1916, p. 468.

Galbula leucogastra leucogastra HELLMAYR, Nov. Zool., XVII, 1910, p. 390 (Borba, Rio Madeira).

Range: The Guianas, westward in northern and northwestern Brazil, at least to the upper Rio Negro and lower Rio Madeira.

1: British Guiana (Demerara R.).

[a] *Galbula tombacea pastazæ* TACZANOWSKI and BERLEPSCH: Differs from *G. t tombacea*, chiefly in having the outer rectrices wholly rufous.

[b] *Cf.* remarks concerning variation in coloration of cheeks and malar region by Hellmayr (Nov. Zool., 1910, p. 390) and SNETHLAGE (Journ. für Ornith., 1908, p. 20).

[c] *Cf.* Berlepsch, *l. c.*

***Galbula leucogastra chalcothorax** (*Sclater*). BRONZE-BREASTED JACAMAR.

Galbula chalcothorax SCLATER, Proc. Zool. Soc. Lond., 1854, p. 110 (Quixos, Ecuador); *Id.*, Mon. Jacamars and Puff-birds, 1880, p. 37, pl. 10; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 171 (Rio Napo; Quixos, and Sarayacu, Ecuador; Pebas and Elvira, Peru); *Id.*, in Wytsman's Gen. Avium. pt. 10, 1909, p. 5; GOODFELLOW, Ibis, 1902, p. 213 (near Coca, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 232 (Alto Amazonia).

Galbula leucogastra chalcothorax HELLMAYR, Nov. Zool., XVII, 1910, p. 390, in text (Rio Napo).

Caucalias chalcothorax CABANIS and HEINE, Mus. Hein., IV, 1863, p. 218.

Range: Eastern Ecuador and eastern Peru.

1: "Ecuador."

Genus **PSILOPORNIS** Ridgway.

Psilopornis Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 361 (Type *Galbula albirostris* Latham).

***Psilopornis albirostris albirostris** (*Latham*). WHITE-BILLED JACAMAR.

Galbula albirostris LATHAM, Index Orn., I, 1790, p. 245 ("America Austral" = Cayenne[a]); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 27, pl. 7; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 168, part; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 5, part; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 104 (La Pricion; La Union and Nicare, Caura River, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 276 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 231 (Obidos).

Psilopornis albirostris albirostris BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 54 (Lelydorp, Surinam).

Range: The Guianas, Venezuela and north Brazil.

2: British Guiana (Mazaruni R.).

Psilopornis albirostris chalcocephala (*Deville*).[b] BRONZE-HEADED JACAMAR.

Galbula chalcocephala DEVILLE, Rev. et Mag. de Zool., 1849, p. 55 (Sarayacu, Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 117.

Galbula albirostris chalcocephala CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 337 (La Morelia, Colombia).

Range: Eastern Ecuador, Peru, western Brazil and southeastern Colombia.

Genus **BRACHYGALBA** Bonaparte.

Brachygalba Bonaparte, Ateneo Italiano, II, 1854, p. 129 (Consp. Volucr. Zygod., 1854, p. 13) (Type *Brachygalba albiventris* Bonaparte = *Galbula lugubris* Swainson).

[a] *Cf.* Berlepsch and Hartert, *l. c.*

[b] *Galbula albirostris chalcocephala* (DEVILLE): Differs from *G. a. albirostris* in having the crown more purplish bronze; under parts darker; chin blacker and maxilla nearly or quite black.

***Brachygalba lugubris** (*Swainson*). BLACK-BILLED JACAMAR.

Galbula lugubris SWAINSON, Anim. in Menag., 1838, p. 329 (Brazil).

Jacamaralcyon lugubris GRAY, List of Fiss. B. M., 1848, p. 67.

Galbula inornata SCLATER, Contr. Orn., 1852, p. 32.

Brachygalba inornata SCLATER, Proc. Zool. Soc. Lond., 1855, p. 15; (?) TACZANOWSKI, Orn. Pérou, III, 1886, p. 120.

Brachycex lugubris CABANIS and HEINE, Mus. Hein., IV, 1866, p. 215.

Brachygalba lugubris SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 39, part, pl. XI (larger fig.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 171 (British Guiana; Rio Tocantins, Brazil; Pebas, eastern Peru, etc.); *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 5, pl. 1, fig. 6; BERLEPSCH and HARTERT, Nov. Zool. IX, 1902, p. 104 (La Pricion and La Union, Caura R., Venezuela); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 232 (Rio Acara; Rio Tocantins; Monte Alegre; Rio Macuru, Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 470.

Brachygalba lugubris lugubris HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: The Guianas, Venezuela, northern Brazil and Peru.[a]

2: Brazil (base of Serra da Lua, near Boa Vista, Rio Branco, Amazonas).

Brachygalba fulviventris fulviventris *Sclater*. FULVOUS-BELLIED JACAMAR.

Brachygalba fulviventris SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 172 (Bogotá).

Brachygalba lugubris SCLATER, Mon. Jacamars and Puff-birds, p. 39, XI (small fig.), part (Bogotá region).

Brachygalba fulviventris fulviventris CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 338 (Buena Vista; Villavicencio, Colombia).

Range: Eastern Colombia (eastern base of eastern Andes, north of the Amazonian region).

2: "Bogotá" 1; "Colombia" 1.

***Brachygalba fulviventris caquetæ**[b] *Chapman*. CAQUETA JACAMAR.

Brachygalba fulviventris caquetæ CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 338 (La Morelia, alt. 600 ft., Rio Bodoquera, Caqueta, Colombia).

Brachygalba fulviventris SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 172, part (Sarayacu and Rio Napo, Ecuador)[c].

Range: Amazonian Colombia, from base of eastern Andes southward to eastern Ecuador and perhaps eastern Peru?

[a] The western range of *B. lugubris* is imperfectly known and requires investigation. Sclater records this white-bellied form from Pebas, eastern Peru (*l. c.*).

[b] *Brachygalba fulviventris caquetæ* CHAPMAN: Similar to *B. f. fulviventris*, but differs in having the crown tipped with pale ochraceous buff, or ochraceous tawny; nuchal region and foreneck more rufescent; lower back, rump and tail coverts darker (in some specimens shining greenish black sharply defined from the brownish anterior parts); inner wing quills blacker and with little or no brownish; anterior underparts averaging more rufescent.

[c] *Cf.* Chapman, *l. c.*, p. 339.

Brachygalba goeringi *Sclater and Salvin.* GOERING'S JACAMAR.

Brachygalba goeringi SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1869, p. 253, pl. XVIII (Lake of Valencia, Venezuela); SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 41, pl. 12; *Id.*, in Wytsman's Gen. Avium. pt. 10, 1909, p. 6.

Range: Northern Venezuela.

***Brachygalba salmoni** *Sclater and Salvin.* SALMON'S JACAMAR.

Brachygalba salmoni SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1879, p. 535 (Rio Nichi, Antioquia, Colombia); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 43, pl. 13; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 173; *Id.*, in Wytsman's Gen. Avium, 1909, p. 6; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 370 (Cana Darién, eastern Panama).

Range: Eastern Panama, southward to central Colombia (Rio Nichi, Antioquia).

Brachygalba albigularis (*Spix*). WHITE-THROATED JACAMAR.

Galbula albigularis SPIX, Av. Bras., I, 1824, p. 54, pl. 57, fig. 1.

Brachygalba albigularis SCLATER, Proc. Zool. Soc. Lond., 1857, p. 262; *Id.*, Cat. Am. Bds., 1852, p. 267; *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 45, pl. XIV; *Id.*, in Wytsman's Gen. Avium, 1909, pt. 10, p. 6; TACZANOWSKI, Orn. Pérou, III, 1886, p. 119; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 173 (Rio Javari, Upper Amazons); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 600 (Spix's Types); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 233 (Monte Verde, Rio Purús, western Brazil).

Brachycex albigularis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 215.

Range: Western Brazil and eastern Peru.

Brachygalba melanosterna *Sclater.* BLACK-BREASTED JACAMAR.

Brachygalba melanosterna SCLATER, Proc. Zool. Soc. Lond., 1855, p. 15 (Goyaz); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 47, pl. XV; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 174; *Id.*, in Wytsman's Gen. Avium. 1909, pt. 10, p. 6; ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 133 (Chapada, Matto Grosso); HELLMAYR, Nov. Zool., XV, 1908, p. 87 (Faz Goyaz, Brazil); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 232 (Rio Curua, Brazil).

Range: Central Brazil, west to Bolivia.

Genus **JACAMARALCYON** Lesson.

Jacamaralycon Lesson, Traité d'Orn., 1831, p. 235 (Type *Galbula tridactyla* Vieillot).

***Jacamaralycon tridactyla** (*Vieillot*). THREE-TOED JACAMAR.

Galbula tridactyla VIEILLOT, Nouv. Dict. d'Hist. Nat., XVI, 1817, p. 445 ("Bresil"); SPIX, Av. Bras., I, 1824, p. 55, pl. 57; PELZELN, Orn. Bras., 1871, p. 25.

Galbula ceycoides JARDINE and SELBY, Ill. Orn., I, 1830, pl. 22.

Galbula armata SWAINSON, An. in Menag., 1831, p. 328.

Jacamaralycon brasiliensis LESSON, Traité d'Orn., 1831, p. 235.

Cauax trydactylus CABANIS, Journ. für Ornith., 1874, p. 227.

Jacamaralycon tridactyla SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 49, pl. XVI; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 174 (Santa Fé Minas; Novo Fribourgo, Brazil, etc.); *Id.*, in Wytsman's Gen. Avium, 1909, pt. 10, p. 6; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 602 (Spix's Types).

Range: Southeastern Brazil.

1: Brazil (São Paulo).

Genus **GALBALCYRHYNCHUS** Des Murs.

Galbalcyrhynchus Des Murs, Rev. Zool., 1845, p. 207 (Type *G. leucotis* Des Murs).

Galbalcyrhynchus leucotis *Des Murs*. WHITE-EARED JACAMAR.

Galbalcyrhynchus leucotis DES MURS, Rev. Zool., 1845, p. 207 ("Santa Fé de Bogotá"); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 53, pl. XVII; *Id.*, in Wytsman's Gen. Avium. pt. 10, 1909, p. 6; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 175; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 339 (La Morelia, Colombia).

Cauecias leucotis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 228.

Range: Eastern Peru, Colombia and Ecuador.

Galbalcyrhynchus purusianus[a] *Goeldi*. RIO PURÚS JACAMAR.

Galbalcyrhynchus purusianus GOELDI, Aves do Bras., 1904, p. 172; *Id.*, Proc. 6th Int. Congress de Zool., Berne, 1904, p. 548 (Upper Rio Purús); *Id.*, Alb. Aves Amazon, pt. 3, 1900, pl. 27, figs. 1-2; SCLATER, in Wytsman's Gen. Avium pt. 10, 1909, p. 6; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 233 (Bom Lugar; Monte Verde; and Porto Alegre, Rio Purús).

Galbalcyrhynchus leucotis innotatus VON IHERING, Rev. Mus. Paulista, VI, 1905, p. 445 (Rio Jurua); *Id.*, Cat. Fauna Bras., p. 172; *Id.*, Aves do Brazil, I, 1907, p. 172 (Rio Jurua and Rio Purús).

Range: Northwestern Brazil (and possibly farther north and west).[b]

Subfamily Jacameropinæ.

Genus **JACAMEROPS** Oken.

Jacamerops Oken, Isis, I, 1817, p. 1148 (Type *Les Jacamerops* Cuvier = *Alcedo grandis* Gmelin = *Alcedo aurea* Müller).

*Jacamerops aurea (*Müller*). GREAT JACAMAR.

Alcedo aurea MÜLLER, Syst. Nat., Suppl., 1776, p. 94 (Berbice, Dutch Guiana).

Jacamerops aurea SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 508; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 104 (Suapure, Venezuela); VON IHERING, Revista Mus. Paulista, IV, 1904, p. 445 (Rio Jurua,

[a] *Galbalcyrhynchus purusianus* GOELDI: Similar to *G. leucotis*, but lacks the white spot.

[b] *Cf.* Chapman, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 339, in text.

Brazil); HELLMAYR, Nov. Zool., XIV, 1907, p. 84, crit. (Teffé, Brazil); *Id.*, XVII, 1910, p. 390 (Calama, Rio Madeira); SCLATER, in Wytsman's Gen. Avium, 1909, p. 7, pl. 1, figs. 8-9; CHUBB, Bds. Brit. Guiana, I, 1916, p. 471; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 362; HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Jacamerops aureus SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 234 (Rio Gaumá; Rio Acari; Rio Tapajoz; Rio Purús, etc., Brazil).

Jacamerops grandis LESSON, Traité d'Orn., 1831, p. 234, pl. 27, fig. 2, DESCOURTILZ, Orn. Bras., 1852, pl. 18, fig. 4, and text; SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 176; *Id.*, Monogr. Jacamars and Puff-birds, 1880, p. 57, pl. 18; *Id.*, in Wytsman's Gen. Avium, pt. 10, 1909, p. 7; TACZANOWSKI, Orn. Pérou, III, 1886, p. 122.

Lamprotila platyrhynchus SWAINSON, Classif. Bds., II, 1837, p. 336.

(?) *Jacamerops isidori* DEVILLE[a], Rev. Zool., 1849, p. 55 (Sarayacu and Pampa del Sacramento, eastern Peru); SCLATER, Syn. Galb., 1852, p. 9; DES MURS, Exped. de Castelnau, Zool., Ois., 1855, pl. 10; HARTLAUB, Journ. für. Orn., 1857, p. 42.

(?) *Jacamerops isidori* BRABOURNE and CHUBB, Bds. S. Am., I, 1912, p. 163, No. 1607.

Range: Eastern Costa Rica, Panama, Colombia, Venezuela, the Guianas, Amazonian Brazil, eastern Ecuador and eastern Peru.

4: British Guiana (Mazarumi River 2, "British Guiana" 2).

Suborder BUCCONES.

Family BUCCONIDÆ. The Puff-birds.

Genus BUCCO Brisson.

Bucco Brisson, Orn., IV, 1760, p. 92 (Type *Bucco capensis* Linnæus = *Bucco collaris* Latham).[b]

Bucco capensis *Linnæus*. COLLARED PUFF-BIRD.

Bucco capensis LINNÆUS, Syst. Nat., I, 1766, p. 168 (Guiana); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 102 (Mataben, Orinoco, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 278 (Cayenne); HELLMAYR, Nov. Zool., XVII, 1910, p. 390 (Borba, Rio Madeira); *Id.*, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 235 (Pará; Peixe-Boi, northeastern Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 473; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 320 (Mataben Rapids, Orinoco); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 339 (La Morelia; Florencia; Colombia).

Tamatia collaris LESSON, Traité d'Orn., 1831, p. 167.

Capito collaris TSCHUDI, Faun. Per., Aves, 1846, p. 259.

[a] The type of *Jacamerops isidori* Deville may prove to represent a distinct species. Sclater considered it "merely a melanoid variety of *J. grandis*, the green of the back having passed into a dark purple" (Cat. Bds. Brit. Mus., XIX, 1891, p. 177).

[b] *Cf.* Newton, Ibis, 1876, pp. 96–104.

Bucco collaris LATHAM, Index Orn., I, 1790, p. 202; SCLATER, Mon. Jacamars and Puff-birds, 1880, p. 61, pl. XIX; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 180; TACZANOWSKI, Orn. Pérou, III, 1886, p. 123.

Range: Guiana, Venezuela, southeastern Colombia, northern Brazil, Ecuador and Peru.

Genus **NOTHARCHUS** Cabanis and Heine.

Notharchus Cabanis and Heine, Mus. Hein., IV, 1863, pp. 146 (footnote), 149 (Type *Tamatia hyperrhynchus* Bonaparte).

*Notharchus macrorhynchos (*Gmelin*). LARGE-BILLED PUFF-BIRD.

Bucco macrorhynchos GMELIN, Syst. Nat., I, 1788, p. 406 (Cayenne); TEMMINCK, Cat. Syst., 1807, p. 55.

Bucco macrorhynchus SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 65, pl. 20; (Guiana, Cayenne, Rio Negro, Rio Branco, etc.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 181; BERLEPSCH, Nov. Zool., XV, 1908, p. 279 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 473.

Cyphos macrorhynchus STRICKLAND, Ann. & Mag. Nat. Hist., VI, 1841, p. 418.

Range: The Guianas, and northern Brazil (Rio Negro and Rio Branco regions).

1: British Guiana (Mazaruni R.).

Notharchus hyperrhynchus hyperrhynchus (*Sclater*). BONAPARTE'S PUFF-BIRD.

Bucco hyperrhynchus SCLATER, Proc. Zool. Soc. Lond., 1855, p. 193, pl. 105 (Upper Amazons); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 71, pl. 22; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 183 (Chamicuros, eastern Peru; Pará and Pernambuco, Brazil); HELLMAYR, Nov. Zool., XIV, 1907, p. 399 (Humaytha, Rio Madeira); *Id.*, XVII, 1910, p. 391 (Alliana, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Bucco macrorhynchus hyperrhynchus SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 236 (Pará; Rio Tocantins; Rio Purús).

Bucco giganteus PELZELN, Orn. Bras., 1871, p. 20.

Notharchus hyperrhynchus hyperrhynchus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 375, in key.

Range: Northern Brazil and eastern Peru.

*Notharchus hyperrhynchus leucocrissus[a] (*Sclater*). SCLATER'S PUFF-BIRD.

Bucco leucocrissus SCLATER, Proc. Zool. Soc. Lond., 1860, p. 284 (Babohoyo, western Ecuador).

[a] *Notharchus hyperrhynchus leucocrissus* SCLATER: Similar to *N. h. dysoni*, but differs chiefly in having the pectoral band wider; flanks more heavily barred.

Notharchus hyperrhynchus leucocrissus CHAPMAN, Bull. Am. Mus. Nat. Hist. XXXVI, 1917, p. 340, crit.[a] (Honda, Colombia).

(?) *Bucco dysoni* STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 199 (Manimo R., Venezuela).

Notharchus napensis SCLATER, Cat. Am. Bds., 1862, p. 269 (Napo, Ecuador).

Range: Western Ecuador; northern Venezuela; Colombia, and eastern Panama.

4: "W. Ecuador (Riccado)" 1; Venezuela (Encontrados) 1; Colombia 2.

***Notharchus hyperrhynchus dysoni** (*Sclater*). DYSON'S PUFF-BIRD.

Bucco dysoni SCLATER, Proc. Zool. Soc. Lond., 1855, p. 193 (Honduras); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 67, pl. 21; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 182, part (Honduras; Guatemala; Nicaragua; Chiriqui, Panama), SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 511 (Central America).

Notharchus hyperrhynchus dysoni RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 376, part (Central America and Mexico).

Range: Southeastern Mexico (Oaxaca and Chiapas); Guatemala; British Honduras; Honduras; Nicaragua; Costa Rica, and western Panama.

1: "Panama."

***Notharchus swainsoni** (*Gray and Mitchell*). SWAINSON'S PUFF-BIRD.

Bucco swainsoni GRAY and MITCHELL, Gen. Bds., I, 1846, p. 74, pl. XXVI (Brazil); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 73, pl. 23; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 183; DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 322 (Paraguay and Missiones, northeastern Argentina).

Notharchus swainsoni CABANIS and HEINE, Mus. Hein., IV, I, 1863, p. 151; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 376, in key.

Range: Southeastern and southern Brazil, Paraguay and extreme northeastern Argentina (Missiones).

1: Brazil ("Faz Cajoa").

***Notharcus pectoralis** (*Gray*). BLACK-BREASTED PUFF-BIRD.

Bucco pectoralis GRAY, Gen. Bds., I, 1846, p. 74, pl. 26 (no locality given);[b] SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 75, pl. 24; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 184; WYATT, Ibis, 1871, p. 374 (Magdalena Valley, Colombia); BERLEPSCH, Journ. für Ornith., 1884, p. 277 (Bucaramanga Colombia); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 513; HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1194 (Novita; Tado; Noanama, Colombia).

[a] Chapman states that two specimens from Honda, Colombia, agree with specimens from eastern Panama and the Panama R.R., and also with one from Chone, western Ecuador.

[b] I suggest for the type locality Valley of the lower Magdalena River, Colombia.

Notharchus pectoralis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 152; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 379; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 340 (Bagado; Barbacoas; Puerto Valdivia; Nare, lower Magdalena, Colombia).

Range: Eastern Panama to central Colombia (in tropical zone of Pacific coast region and eastward to the Magdalena and Cauca Valleys, Antioquia, etc.).

1: Colombia (Noanama, Rio San Juan).

Notharchus ordii (*Cassin*). ORD'S PUFF-BIRD.

Bucco ordii CASSIN, Proc. Acad. Nat. Sci. Phila., V, 1851, p. 154, pl. 8 ("Venezuela").[a]

Bucco ordi SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 77, pl. 25 (Rio Xié; Rio Icanna; upper Rio Negro); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 184 (Ega; Cayenne?); BERLEPSCH, Nov. Zool. XV, 1908, p. 279 (Cayenne); SNETHLAGE Bol. Mus. Goeldi, VIII, 1914, p. 236 (Cussary, Amazon R.).

Notharchus ordii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 376, in key.

Range: Rio Negro and Amazon Region from Ega to Cussary, Brazil; Venezuela?; Guiana??

***Notharchus tectus tectus** (*Boddaert*). CAYENNE PUFF-BIRD.

Bucco tectus BODDAERT, Tabl. Pl. Enl., 1783, p. 43 (Cayenne); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 79, pl. 26; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 185; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 102 (Guapure; La Pricion, Venezuela); HELLMAYR, Nov. Zool., XII, 1905, p. 296 (Pará); *Id.*, XIII, 1906, p. 380 (Prata Dist., Pará); BERLEPSCH, Nov. Zool., XV, 1908, p. 279 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 236 (Pará; Rio Guamá; Rio Tocantins; Marajo; Monte Alegre; Obidos; Rio Jamunda; Maranhão); CHUBB, Bds. British Guiana, I, 1916, p. 474.

Bucco tectus tectus HELLMAYR, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Notharchus tectus tectus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 376 in key; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 54 (Paramaribo, Surinam).

Range: The Guianas, northern and northeastern Brazil.

2: Brazil (Santarem 1, Base of Serra da Lua, near Boa Vista, Rio Branco 1).

***Notharchus tectus subtectus** (*Sclater*).[b] PANAMA PUFF-BIRD.

[a] So far as known, this bird does not occur in Venezuela. The type specimen probably came from the region of the upper Rio Negro.

[b] *Notharchus tectus subtectus* (SCLATER): Differs from *N. t. tectus* in having the upper parts deeper and more glossy black; white spots in head confined to the forehead and anterior crown; black crescent of foreneck narrower. There are also some differences in tail-marking, which appears to be variable.

Bucco subtectus SCLATER, Proc. Zool. Soc. Lond., 1860, p. 296 (Esmeraldas, western Ecuador); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 83, pl. 27; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 186; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 513.

Bucco tectus subtectus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1195 (Tado, Colombia).

Notharchus tectus subtectus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 379; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 341 (Barbacoas; Nare; Puerto Berrio; Malena, Colombia); Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 258 (Gatun, Panama Canal Zone).

Range: Panama, south through Colombia (Antioquia, Lower Cauca and Magdalena Valley, etc.) to western Ecuador.

1: Panama (Veragua).

***Notharchus tectus picatus** (*Sclater*). PIED PUFF-BIRD.

Bucco picatus SCLATER, Proc. Zool. Soc. Lond., 1855, p. 194 (Huallaga); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 81; *Id.*, Cat. Bds. Brit. Mus., XIX; 1891, p. 186 (Huallaga; Samiria; Upper Amazons; and Sarayacu, eastern Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 124 (Chamicuros; Yurimaguas, Peru).

Nothriscus picatus CABANIS and HEINE, Mus. Hein., IV, I, 1863, p. 146.

Notharchus tectus picatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 376 (footnote).

Range: Eastern Peru; eastern Ecuador, and northwestern Bolivia.

1: Bolivia (Porto Velho).

Genus ARGICUS Cabanis and Heine.

Argicus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 146, footnote p. 148 (Type *Cyphos macrodactylus* SPIX); Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 371.

Cyphos (*nec* Schonherr, 1823) SPIX, Av. Bras., I, 1824, p. 51 (Type *C. macrodactylus* SPIX).

***Argicus macrodactylus macrodactylus** (*Spix*). LONG-TOED PUFF-BIRD.

Cyphos macrodactylus SPIX, Av. Bras., 1824, p. 51, pl. 39, fig. 2 ("In sylvis flum. Amazonum" = Fonteboa).[a]

Bucco macrodactylus SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 85, pl. 28; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 186; TACZANOWSKI, Orn. Pérou, III, 1886, p. 128; GOODFELLOW, Ibis, 1902, p. 213 (Archidona and Coca, Ecuador); (?) BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 102 (Maipures, Orinoco R.,); HELLMAYR, Nov. Zool., XIV, 1907, p. 400 (Humaytha, Rio Madeira, Brazil); *Id.*, XVII, 1910, p. 392 (Marmellos, Rio Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 236 (Rio Purús).

Argicus macrodactylus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 341 (La Morelia; Villavicencio; Buena Vista, Colombia).

[a] *Cf.* Berlepsch and Hartert, *l. c.*, p. 102, footnote.

Range: Northwestern Brazil, Venezuela (Orinoco region), southeastern Colombia, Ecuador and Peru.

2: "Colombia."

Argicus macrodactylus caurensis *Cherrie*.[a] CAURA RIVER LONG-TOED PUFF-BIRD.

Argicus macrodactylus caurensis CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 389 (La Union, Caura R., Venezuela).

Range: Caura River Region, Venezuela.

Genus NYSTACTES Gloger.

Nystactes, Gloger in Froriep's Notizen, XVI, 1827, p. 277 (Type *Bucco tamatia* Gmelin).

Chaunornis Gray, List Gen. Bds., 1841, p. 13 (Type *Bucco tamatia* Gmelin).

Nystactes noaname (*Hellmayr*). HELLMAYR'S PUFF-BIRD.

Bucco noaname HELLMAYR, Bull. Brit. Orn. Club. XXV, 1909, p. 20 (Noanamá, western Colombia); *Id.*, Proc. Zool. Soc. Lond., 1911, p. 1195 (Noanamá; Tado; Valley of the San Juan R., western Colombia).

Nystactes noaname CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 341 (Iguamiando, Quibdo, Colombia).

Range: Valleys of the upper San Juan and Atrato rivers, western Colombia.

***Nystactes tamatia tamatia**[b] (*Gmelin*). CAYENNE SPOTTED PUFF-BIRD.

Bucco tamatia GMELIN, Syst. Nat., I, 1788, p. 405 (Cayenne); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 93, pl. 31; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 188; BERLEPSCH and HARTERT, Nov. Zool.,IX, 1902, p. 102 (Maipures, Orinoco R., Venezuela); BERLEPSCH, Nov. Zool., XV, 1909, p. 279 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 475.

Bucco tamatia tamatia HELLMAYR, Nov. Zool., XVII, 1910, pp. 391-392 (French Guiana; British Guiana; Surinam; Maipures; Venezuela; Upper Rio Negro; Manaos; Rio Branco; Borba, on right bank of Rio Madeira; Guapore R., Brazil).

[a] *Argicus macrodactylus caurensis* CHERRIE: Similar to *A. m. macrodactylus*, but differs in having the under parts darker; the irregular, narrow, transverse, blackish lines closer together and the white area back of the black breast band much reduced, almost absolete; general color of breast and abdomen dusky olive brown (instead of cinnamon buff).

[b] Key to the Subspecies:

A. Throat deep tawny ochraceous:

a. Black spots on underparts less numerous and smaller. *N. tamatia tamatia* (Cayenne, N. Brazil, etc.).

b. Black spots on underparts more numerous and longer. *N. tamatia hypnaleus* (N. E. Brazil).

B. Throat buff:

N. tamatia pulmentum (From west bank of Rio Madeira to E. Peru, E. Ecuador, etc.).

Nystactes tamatia tamatia BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 54 (Paramaribo, Lelydorp, and Javaweg, Surinam.

Range: The Guianas; Venezuela; more central Amazonian region, west to the Madeira R. (right bank).

6: Surinam (vicinity of Paramaribo) 2; British Guiana 2; Brazil (Boa Vista, Rio Branco 1, Itacoatiara, R. Amazon 1).

Nystactes tamatia pulmentum (*Sclater*). WESTERN SPOTTED PUFF-BIRD.

Bucco pulmentum SCLATER, Proc. Zool. Soc. Lond., 1855, p. 194, pl. 106 (Upper Amazons); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 97, pl. 31; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 189; TACZANOWSKI, Orn. Pérou, III, 1886, p. 126.

Bucco tamatia pulmentum HELLMAYR, Nov. Zool., XIV, 1907, p. 400 (Humaytha, left bank of Rio Madeira); *Id.*, XVII, 1910, pp. 391-392 (Humaytha, Brazil; Pebas and Chamecuros, Peru; Sarayacu, eastern Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 237 (Alto Amazonas).

Range: Upper Amazon region from left bank of the Madeira River westward, eastern Peru, eastern Ecuador.

Nystactes tamatia hypnaleus (*Cabanis and Heine*). PARÁ SPOTTED PUFF-BIRD.

Bucco hypnalea CABANIS and HEINE, Mus. Hein., IV, I, 1863, p. 145, footnote (Pará).

Bucco tamatia hypnaleus HELLMAYR, Nov. Zool., XVII, 1910, p. 392 (Pará; Rio Capim; Marajo, northeastern Brazil).

Bucco tamatia hypnalæus SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 237 (Pará, Rio Tocantins, Rio Acara, etc.); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Bucco tamatia GOELDI, Alb. Aves Amazon, pt. 3, 1900, pl. 26, fig. 4.

Range: Northeastern Brazil.

Genus **HYPNELUS** Cabanis and Heine.

Hypnelus Cabanis and Heine, Mus. Hein., IV, 1863, p. 143 (Type *Tamatia bicincta* Gould).

***Hypnelus bicinctus** (*Gould*). TWO-BANDED PUFF-BIRD.

Tamatia bicincta GOULD, Proc. Zool. Soc. Lond., 1836, p. 80 ("Cayenne" = Venezuela)[a].

Tamatia bitorquata SWAINSON, Anim. in Menag., 1838, p. 227 ("Trinidad").

Bucco bicinctus SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 91, pl. 30; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 188 (Pilar; San Esteban, Venezuela); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 102 (Altagracia; Caicara, Venezuela); LOWE, Ibis, 1907, p. 559 (Margarita I.); CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1909, p. 244 (Margarita I.); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 199 (Guinipa R., Venezuela).

[a] *Cf.* Berlepsch and Hartert, *l. c.*, p. 102, footnote.

Hypnelus bicinctus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 143; RIDGWAY, Bull. U. S. Nat. Mus. No. 50, VI, 1914, p. 382, in key; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 321 (Maripa, Caura R., Venezuela).

Range: Venezuela and Margarita Island.

9: Venezuela (Lake Valencia 1, Maracay 1); Margarita Island, 7.

***Hypnelus ruficollis ruficollis** (*Wagler*). RUSSET-THROATED PUFF-BIRD.

C[apito] ruficollis WAGLER, Isis, 1829, p. 658 ("Mexico" = Bonda, Santa Marta, Colombia), by designation)[a].

Bucco ruficollis SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 89, pl. 29; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 187; WYATT, Ibis, 1871, p. 374 (Canuto, Colombia); STONE, Proc. Acad. Nat. Sci. Phila., 1899, p. 305 (vicinity of Bogotá, Colombia); ALLEN, Bull. Am. Mus. Nat. Hist., 1900, p. 135 (Santa Marta and Bonda, Colombia).

Hypnelus ruficollis ruficollis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 382; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917 p. 341 (Turbaco; La Playa; Calamar; Banco; Virrud; Puerto Berrio, Colombia).

Range: Colombia and northwest coast of Venezuela.

4: Venezuela (Rio Aurare, east of Maracaibo).

***Hypnelus ruficollis coloratus**[b] *Ridgway*. VENEZUELAN RUSSET-THROATED PUFF-BIRD.

Hypnelus ruficollis coloratus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 382 (Encontrados, western Venezuela).

Range: Western Venezuela (Encontrados region, south of Lake Maracaibo).

†9: Venezuela (Encontrados 7, Catatumbo 2).

Genus **NYSTALUS** Cabanis and Heine.

Nystalus Cabanis and Heine, Mus. Hein., IV, 1863, p. 139 (Type *Alcedo maculata* Gmelin).

***Nystalus maculatus maculatus** (*Gmelin*). BRAZILIAN SPOTTED PUFF-BIRD.

Alcedo maculata GMELIN, Syst. Nat., I, 1788, p. 451 (Brazil).

Bucco somnolenta SWAINSON, Bds. of Brazil and Mexico, 1841, pl. 9.

Bucco maculatus SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 99, pl. 32, part; *Id.*, Cat. Bds. Brit. Mus. XIX, 1891, p. 190, part (Pernambuco, Bahia); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 237 (Santarem; Marajo; Maranhão).

[a] *Cf.* Chapman, *l. c.*, p. 341.

[b] *Hypnelus ruficollis coloratus* RIDGWAY: Differs from *H. r. ruficollis* in having the under parts of body deep buff; throat decidedly darker, followed by a narrow band of buffy white (much narrower than in *H. r. ruficollis*); black pectoral band broader; pale spots on scapulars, etc. smaller. This is a strongly marked form which may prove worthy of specific rank.

B[ucco] m[aculatus] maculatus HELLMAYR, Nov. Zool., XV, 1908, p. 86, in text (Bahia, Santarem, etc.).

Range: Eastern Brazil.

4: Brazil (São Amaro, Bahia, 2; Macaco Secco, Bahia 1; Santarem 1).

Nystalus maculatus parvirostris (*Hellmayr*).[a] SMALL-BILLED PUFF-BIRD.

Bucco maculatus parvirostris HELLMAYR, Nov. Zool., XV, 1908, p. 86 (Rio Araguaya, Goyaz, Brazil).

Range: Central Brazil (Goyaz; Matto Grasso (Guayabo and Caicara?)[b]

***Nystalus maculatus nuchalis** *subsp. nov.*[c] CEARÁ PUFF-BIRD.

Range: Northeastern Brazil (Prov. of Ceará).

10: Brazil (Serra Baturite, Ceará 1; Quixada, Ceará 6; Jua, near Iguatu, Ceará 3), including the type.

Nystalus maculatus striatipectus (*Sclater*). STRIPE-BREASTED PUFF-BIRD.

Bucco striatipectus SCLATER, Proc. Zool. Soc. Lond., 1853, p. 123 (Bolivia); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 101, pl. 33; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 190; LÖNNBERG, Ibis, 1903, p. 468 (Tatarenda, Bolivian Chaco).

(?) *Bucco maculatus striatipectus* ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 134 (Chapada, Matto Grosso).[d]

B[ucco] m[aculatus] striatipectus HELLMAYR, Nov. Zool., XV, 1908, p. 86, in text (Tucuman and Salta, Argentina).

Range: Bolivia, northwestern Argentina and southwestern Brazil.

[a] Key to the Subspecies of *N. maculatus:*

A—Breast and sides *spotted;* foreneck darker.
  a—Tail longer, bill larger and longer.
    a^1—Tail more than 70; bill more than 32 mm.; band on nape wider, etc. *N. maculatus maculatus* (eastern Brazil).
    a^2—Size similar, band on nape narrower, etc. *N. maculatus nuchalis* (northeastern Brazil).
  b—Tail shorter; bill smaller.
a^1—Tail less than 70; bill less than 32 mm. *N. m. parvirostris* (central Brazil).
B—Breast and sides *streaked;* foreneck paler.
N. m. striatipectus (southwestern Brazil, Bolivia and N. W. Argentina).

[b] Not typical, *cf.* Hellmayr, *l. c.*

[c] *Nystalus maculatus nuchalis* subsp. nov: Type from Jua, near Iguatu, Ceará, Brazil. Adult male, No. 47235, Field Museum of Natural History. Collected by R. H. Becker, August 8, 1913.

Similar to *N. m. maculatus* in size, length of bill, tail, etc., but differs in having the band across the nape much wider and more tawny; feathers of crown tipped with tawny, pale ends of back feathers more extensive and irregular; pale bands on the rectrices wider and paler.

[d] Birds from this region are apparently intermediate between *parvirostris* and *striatipectus* (cf. Hellmayr, *l. c.*).

Genus ECCHAUNORNIS Ridgway.

Ecchaunornis Ridgway, Proc. Biol. Soc. Wash., XXV, 1912, p. 97 (Type *Bucco radiatus* Sclater).

*Ecchaunornis chacuru (*Vieillot*). WHITE-EARED PUFF-BIRD.

Bucco chacuru VIEILLOT, Nouv. Dict. d'Hist. Nat., 1816, p. 239 (Paraguay); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 103, pl. 34; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 191; TACZANOWSKI, Orn. Pérou, III, 1886, p. 129· ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 135 (Chapada, Matto Grosso); HELLMAYR, Nov. Zool., XIV, 1907, p. 400 (Humaytha, Rio Madeira); *Id.*, XV, 1908, p. 85 (Goyaz,); CHUBB, Ibis, 1910, p. 276 (Sapucay, Paraguay); BERTONI, An. Soc. Cient. Argent., LXXV, 1913, p. 86 (Missiones, Argentina); DABBENE, Bol. Soc. Physis, I, 1914, p. 322 (Missiones); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 238.

Ecchaunornis chacuru RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 385, in key.

Capito melanotis TEMMINCK, Pl. Col.,16, 1821, pl. 94 and text (Brazil; Paraguay).

Bucco strigilatus LICHTENSTEIN, Verz. Doubl., 1823, p. 8 (São Paulo).

Tamatia leucotis SWAINSON, Bds. Bras. and Mexico, 1841, pl. 10.

Range: Eastern Peru, Bolivia, Paraguay, northeastern Argentina (Missiones) and Brazil.

2: Peru (Moyobamba).

Ecchaunornis striolatus (*Pelzeln*). STRIOLATED PUFF-BIRD.

Bucco (Capito) striolatus PELZELN, Sitz. Ak. Wien, XX, 1856, p. 500 (Engenho do Cap Gama and No Dourado, Matto Grosso).

Bucco striolatus SCLATER and SALVIN, Ex. Orn., 1869, p. 153, pl. 77; PELZELN, Orn. Bras., 1871, p. 22; SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 107, pl. 35; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 192 (Matto Grosso, Brazil; Yungas, Bolivia, and Sarayacu, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 238; HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Range: Central and northeastern Brazil (Pará) west to Bolivia and eastern Ecuador.

Ecchaunornis radiatus radiatus (*Sclater*). RADIATED PUFF-BIRD.

Bucco radiatus SCLATER, Proc. Zool. Soc. Lond., 1853, p. 122, pl. 50 ("Colombia" = Magdalena Valley); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 109, pl. 36 (smaller fig.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 192, part (Bogotá).

Nystalus radiatus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 341, part (central Colombia).

Ecchaunornis radiatus RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 97, in text.

Ecchaunornis radiatus radiatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 385, in key.

Range: Central Colombia.[a]

[a] The geographical distribution of this supposed subspecies requires investigation (*cf.* Chapman, *l. c.*).

***Ecchaunornis radiatus fulvidus** (*Salvin and Godman*). FULVOUS PUFF-BIRD.

Bucco fulvidus SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1896, p. 514 (Veragua, Panama).

Bucco radiatus (*nec* Sclater, 1853) SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 109, pl. 36 (larger fig.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 192, part (Veragua).

Ecchaunornis radiatus fulvidus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 385.

Range: Panama (Veragua; Lion Hill, etc.) and southward through northern and western Colombia (Remidios; Nichi; Antioquia; Honda, etc.) to western Ecuador (Guayaquil; Chimbo).[a]

1: "Panama."

Genus **MALACOPTILA** Gray.

Malacoptila Gray, List. Gen. Bds., 1841, p. 13 (Type *Bucco fuscus* Gmelin)

***Malacoptila fusca** (*Gmelin*). WHITE-BREASTED MALACOPTILA.

Bucco fuscus GMELIN, Syst. Nat., I, 1788, p. 408 (Cayenne).

Lypornix torquata WAGLER, Syst. Av., 1827, sp. 4.

Monasa unitorques DU BUS, Bull. Ac. Brux., XIV, 1847, pt. 2, p. 107.

Malacoptila nigrifusca SCLATER, Proc. Zool. Soc. Lond., 1855, p. 195.

Malacoptila fusca SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 111, pl. 37; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 193 (Cayenne; Bogotá; Chyavetas; Chamicuros, Peru; Sarayacu, Ecuador; Rio Negro, Brazil); GOODFELLOW, Ibis, 1902, p. 213 (Archidona, Ecuador); BERLEPSCH, Nov. Zool., XV, 1908, p. 279 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 238 (Obidos); CHUBB, Bds. Brit. Guiana, I, 1916, p. 476; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 342 (Andalucia; La Morelia, Colombia).

Range: Guiana, Peru, Ecuador and Colombia.

2: Ecuador? 1; Peru 1.

Malacoptila rufa (*Spix*). RUFOUS MALACOPTILA.

Bucco rufus SPIX, Av. Bras., I, 1824, p. 52, pl. 40 ("in sylvis fl. Amazonum").

Lypornix rufa WAGLER, Syst. Av., 1827, *Lypornix*, sp. 5.

Capito senilis TSCHUDI, Faun. Per. Aves, 1846, p. 529.

Monasa rufa PELZELN, Orn. Bras., 1871, p. 23.

Malacoptila rufa SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 115, pl. 38; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 194; TACZANOWSKI, Orn. Pérou, III, 1886, p. 130; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 599 (Spix's types); *Id.*, Nov. Zool., XIII, 1906, p. 381 (Pará); *Id.*, XIV, 1907, p. 400 (Humaytha, Rio Madeira); *Id.*, XVII, 1910, p. 393 (Janarysinbo; Allianca; Rio Madeira); *Id.*, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 238 (Pará; Maguary; Rio Capim; Rio Tocantins; Rio Xingu; Rio Purús, etc., Brazil).

Range: Northern Brazil and eastern Peru.

[a] Range as given by Ridgway, *l. c.*

***Malacoptila torquata torquata** (*Hahn and Kuster*). STRIPED MALACOPTILA.

Bucco torquatus HAHN and KUSTER, Vog. aus Asien, Lief., XIII, 1822, p. 2, pl. 5 (Bresilien).

Bucco fuscus (*nec* Gmelin) LICHTENSTEIN, Verz. Doubl., 1823, p. 8.

Bucco striatus SPIX, Av. Bras., I, 1824, p. 52, pl. 40, fig. 2 ("Rio de Janeiro, Bahiae").

Malacoptila torquata SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 117, pl. 39 (Rio de Janeiro, São Paulo, etc.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 195 (Bahia; Novo Fribourgo; Rio Claro; Goyaz?, etc.); HELLMAYR, Abh. K. Bayer, Akad. Wiss., XXII, 1906, p. 509 (Spix's types).

Range: Southeastern Brazil.

1: Brazil (São Paulo).

Malacoptila torquata minor[a] *Sassi*. LESSER STRIPED MALACOPTILA.

Malacoptila torquata minor SASSI, Journ. für Ornith., 1911, p. 181 (Miritiba, Maranhão, Brazil).

Range: Northeastern Brazil.

***Malacoptila panamensis panamensis** *Lafresnaye*. PANAMA MALACOPTILA.

Malacoptila panamensis LAFRESNAYE, Rev. Zool., X, 1847, p. 79 (Panama); SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 119, part, pl. 40 (front fig.); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 196, part.

Malacoptila panamensis panamensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 388; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 343, crit. (Choco; Baudo; Novita; Dabeiba; Alto Bonito; Puerto Valdivia, northwestern Colombia).

Range: Western Costa Rica to eastern Panama and northwestern Colombia.

7: Panama 1; Costa Rica (Lagarto 2, Boruco 3); "Colombia" 1.

***Malacoptila panamensis poliopis**[b] (*Sclater*). GRAY-FACED MALACOPTILA.

Malacoptila poliopis SCLATER, Proc. Zool. Soc. Lond., 1862, p. 86, pl. 8 (Esmeraldas, Ecuador).

Malacoptila panamensis poliopis HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1196, part (Guayaquil, western Ecuador); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1914, p. 343 (Los Cisneros; Barbacoas, western Colombia).

Malacoptila panamensis SCLATER, Mon. Jacamars and Puff-birds, 1882, pl. 40 (fig. with grayish crown).

Range: Southwestern Colombia and western Ecuador; northwestern Peru?

1: Ecuador (Ava Maria).

[a] *Malacoptila torquata minor* SASSI: Differs chiefly in its smaller size.

[b] *Malacoptila panamensis poliopis* (SCLATER): Differs from *M. p. panamensis* chiefly in the deeper colored (cinnamon rufous) breast.

***Malacoptila panamensis inornata** (*Du Bus*). NORTHERN MALACOPTILA.

Monasa inornata DU BUS, Bull. Ac. Roy. Belg., XIV, 1847, p. 107 (Guatemala).
Malacoptila inornata SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 125, pl. 41; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 197 (Chisec, Vera Paz, Guatemala).
Malacoptila veræ-pacis SALVIN and SCLATER, Ibis, 1860, p. 40 (Coban, Guatemala).
(?) *Malacoptila fuliginosa* RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 512, in text.[a]
Malacoptila panamensis inornata RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1917, p. 390.

Range: Extreme southern Mexico (Tabasco) south to eastern Costa Rica.

7: Guatemala (Los Amates, Isabel) 3; Nicaragua (San Emilis 1, San Raphael del Norte 1); Costa Rica (Siguirres 1, Limon 1).

Malacoptila mystacalis[b] (*Lafresnaye*). MOUSTACHED MALACOPTILA.

Monasa mystacalis LAFRESNAYE, Rev. et Mag. de Zool., 1850, p. 215 (Colombia = Valparaiso, Santa Marta Mts., Colombia)[c].
Malacoptila mystacalis HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1197 (Loma Hermosa; Siato; near Pueblo Rico, western Colombia); BERLEPSCH, Journ. für Ornith., 1884, p. 315, crit. (Bucaramanga); ALLEN, Bull. Am. Mus. Nat. Hist., XIII, 1900, p. 134 (Valparaiso; Las Nubes, Santa Marta, Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 342 (Novita Trail; La Frijolera; Salento; 20 miles W. of Honda; Anolaima, Colombia).
[*Malacoptila panamensis*] var. *mystacalis* SCLATER, Cat. Bds. Brit. Mus., XIX, 1891, p. 197 (Remedios; Nichi; Antioquia; Bogotá; Venezuela, type of *M. aspersa*, San Cristobal, Venezuela).
(?) *Malacoptila aspersa* SCLATER, Proc. Zool. Soc. Lond., 1853, p. 123 (Venezuela).[d]

Range: Colombia, Venezuela?

Malacoptila fulvogularis fulvogularis *Sclater*. FULVOUS-THROATED MALACOPTILA.

Malacoptila fulvogularis SCLATER, Proc. Zool. Soc. Lond., 1853, p. 123 (Bolivia).
Malacoptila fulvigularis SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 127, pl. 42 (Tilotilo, Bolivian Andes).

Range: Bolivia.

[a] *Cf.* Ridgway, *l. c.*, p. 392, footnote.

[b] *Malacoptila mystacalis* (LAFRESNAYE): Differs from all of the races of *M. panamensis* in larger size, lacking the clearly marked blackish stripes on breast and sides, and in other characters; the sexes are similar.

[c] As suggested by Chapman, *l. c.*

[d] *Cf.* Sclater, Mon. Jacamars and Puff-birds, 1882, p. 122, in text (locality?).

Malacoptila fulvogularis melanopogon[a] *Berlepsch and Stolzmann.* PERUVIAN FULVOUS-THROATED MALACOPTILA.

Malacoptila fulvigularis melanopogon BERLEPSCH and STOLZMANN, Proc. Zool. Soc. Lond., 1902, p. 37 (La Garita, central Peru).

Malacoptila fulvigularis TACZANOWSKI, Orn. Pérou, III, 1886, p. 132, part (Peru).

Range: Peru.

Malacoptila substriata *Sclater.* SUBSTRIATED MALACOPTILA.

Malacoptila substriata SCLATER, Proc. Zool. Soc. Lond., 1853, p. 123, pl. 51 ("Bogotá"); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 130, pl. 43; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 198.

Range: "Colombia."

Genus **MICROMONACHA** Sclater.

Micromonacha Sclater, Proc. Zool. Soc. Lond., 1881, p. 177 (Type *Bucco lanceolata* Deville).

Micromonacha lanceolata (*Deville*). LANCEOLATED MONKLET.

Bucco lanceolata DEVILLE, Rev. et Mag. de Zool., 1849, p. 56 (Pampa del Sacramento, upper Ucayali R., eastern Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 127.

Bucco lanceolatus SCLATER, Syn. Buccon., 1854, p. 13, pl. 3.

Micromonacha lanceolata SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 131, pl. 44 (Rio Napo; Rio Bobonassa, Sarayacu, Ecuador); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 199; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 344 (Buenavista, Narino, southwestern Colombia; Zamora, southeastern Ecuador).

Range: Eastern Peru, Ecuador and southwestern Colombia.

Genus **NONNULA** Sclater.

Nonnula Sclater, Proc. Zool. Soc. Lond., 1853, p. 124 (Type *Bucco rubecula* Spix).

Nonnula rubecula rubecula (*Spix*). RED-BREASTED NONNULA.

Bucco rubecula SPIX, Av. Bras., I, 1824, p. 51, pl. 39, fig. 1 (Malhada, near Rio San Francisco, southeastern Brazil).

L[ypornix] rubecula SWAINSON, Bds. Brasil and Mexico, 1841, pl. 35.

Monasa rubecula PELZELN, Orn. Bras., 1871, p. 23.

Nonnula rubecula SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 133, pl. 45, fig. 1 (Bahia); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 200; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 598 (Spix's Types); *Id.*, Nov. Zool., XV, 1908, p. 85 (Goyaz); CHUBB, Ibis, 1910, p. 276 (Sapucay, Paraguay).

[a] *Malacoptila fulvogularis melanopogon* BERLEPSCH and STOLZMANN: Differs from *M. f. fulvogularis* chiefly in having the forehead and spots on sides of the throat white (not tinged with rufous), and in having the whitish pectoral stripes more washed with rufous.

Nonnula rubicola DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 323 (Missiones).[a]

Range: Paraguay, and extreme north eastern Argentina (Missiones) to southeastern Brazil.

Nonnula rubecula cineracea (*Sclater*). CINEREOUS RED-BREASTED NONNULA.

Nonnula cineracea SCLATER, Proc. Zool. Soc. Lond., 1871, p. 778 (Rio Javari, northeastern border of Peru); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 135, pl. 45, fig. 2; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 200.

Nonnula rubecula cineracea HELLMAYR, Nov. Zool., XVII, 1910, p. 393 (Borba Rio Madeira).

Range: Northeastern Peru and northwestern Brazil.

Nonnula rubecula duidæ[b] (*Chapman*). DUIDA NONNULA.

Nonnula duidæ CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 195 (Foot of Mt. Duida, alt. 700 feet, southern Venezuela).

Range: Mt. Duida, upper Orinoco Region, southern Venezuela.

Nonnula sclateri[c] *Hellmayr*. SCLATER'S NONNULA.

Nonnula sclateri HELLMAYR, Bull. Brit. Orn. Club, XIX, 1907, p. 55 (Humaytha, Rio Madeira, western Brazil); *Id.*, Nov. Zool., XIV, 1907, p. 401 (Humaytha); *Id.*, XVII, 1910, p. 394 (Humaytha).

Range: Rio Madeira region, western Brazil.

Nonnula ruficapilla (*Tschudi*). RUFOUS-HEADED NONNULA.

L[ypornis] ruficapilla TSCHUDI, in Wiegmann's Archiv. für Naturg., 1844, pt. I, p. 300 (Peru).

Malacoptila ruficapilla SCLATER, Ann. & Mag. Nat. Hist., (2), XIII, 1854, p. 480.

Nonnula ruficapilla SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 137, pl. 46, fig. 1; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 200; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 401, in key.

Range: Lower Amazon Valley to southeastern Brazil.

Nonnula frontalis (*Sclater*). PANAMA NONNULA.

Malacoptila frontalis SCLATER, Ann. & Mag. Nat. Hist., (2), XIII, 1854, p. 479 (Interior of Colombia); *Id.*, Syn. Buccon., 1854, p. 20; *Id.*, Proc. Zool. Soc. Lond., 1855, p. 136 (Bogotá); LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., VII 1862, p. 318 (Lion Hill, Panama).

[a] Quotes Bertoni, Ann. Soc. Cient. Arg., LXXV, 1913, p. 86.

[b] *Nonnula rubecula duidæ* (CHAPMAN): Similar to *N. r. cineracea*, but lores, chin, throat and breast ochraceous tawny.

[c] *Nonnula sclateri* HELLMAYR: Belongs to the group represented by *N. r. rubecula* and *N. r. cineracea*, but differs from both by its much smaller size, deep ochraceous buff frontal band, lores and chin. It also lacks the white patch below the eye. The eyelid is bright red and almost bare, while in the allied species it is black and covered with numerous feathers of pure white.

Nonnula frontalis SCLATER, Proc. Zool. Soc. Lond., 1855, p. 196 (Rio Napo, eastern Ecuador); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 139; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 201; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 401; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 344 (Algodonal, Colombia)[a].

Range: Eastern Panama to central Colombia.

Nonnula brunnea *Sclater*. BROWN NONNULA.

Nonnula brunnea SCLATER, Ibis, 1881, p. 600 (Sarayacu, eastern Ecuador); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 141, pl. 46, fig. 2; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 201; TACZANOWSKI, Orn. Pérou, III, 1886, p. 135; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 401 in key.

Range: Interior of Colombia, eastern Ecuador and eastern Peru.

Genus **HAPALOPTILA** Sclater.

Hapaloptila Sclater, Proc. Zool. Soc. Lond., 1881, p. 777 (Type *Malacoptila castanea* Verreaux).

Hapaloptila castanea (*Verreaux*). CHESTNUT SLENDER-WING.

Malacoptila castanea VERREAUX, Rev. Zool., XVIII, 1866, p. 355, pl. XIX ("Bogotá")[b].

Hapaloptila castanea SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 143, pl. 43 (Valleys in vicinity of Quito and near Imtag, western Ecuador; near Frontino, Antioquia, Colombia); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 202; BRABOURNE and CHUBB, Bds. S. Am., I, 1912, p. 167, No. 1648 (Colombia, Ecuador, north Peru).

Range: Western Colombia, Ecuador; north Peru?

Genus **MONASA** Vieillot.

Monasa Vieillot, Analyse, 1816, p. 27 (Type *Coucou noir de Cayenne* Buffon = *Cuculus tranquillus* Gmelin = *Cuculus niger* Müller).

***Monasa niger** (*Müller*). BLACK NUN BIRD.

Cuculus niger MÜLLER, Syst. Nat. Suppl., 1776, p. 90 (Cayenne).
Cuculus ater BODDAERT, Tabl. de Pl. Enl., 1783, p. 30.
Bucco cinereus GMELIN, Syst. Nat., I, 1788, p. 409.
Cuculus tranquillus GMELIN, Syst. Nat., I, 1788, p. 417.
Corvus australis GMELIN, Syst. Nat., I, 1788, p. 377.
Corvus affinis SHAW, Gen. Zool., VII, 1809, p. 381.
Lypornix tranquilla WAGLER, Syst. Av., 1827, *Lypornix*, sp. 1.
Bucco calcaratus LATHAM, Index Orn., I, 1790, p. 206.

[a] According to Chapman (*l. c.*) a male from Algodonal (which is probably typical of this species) is much less deeply colored than specimens from Panama and he suggests that the Panama birds may prove to be a different race.

[b] It is improbable that this species occurs in eastern Colombia. I, therefore, suggest the region of Frontino, state of Antioquia, Colombia for the type locality.

Monasa atra GRAY, List Fiss. Brit. Mus., 1848, p. 49; Pelzeln, Orn. Bras., 1871, p. 22.

Monacha nigra SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 145, pl. 48; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 203.

Monasa nigra BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 103 (Munduapo, Orinoco region and La Pricion; La Union, etc., Caura R., Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 279 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 240 (Maracay; Cunany; Rio Jary; Obidos; Rio Jamunda, northern Brazil); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 395, in key; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 322 (Mouth of Meta River and above; San Feliz River, Orinoco region, Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 55 (Paramaribo, Lelydorp, and Javaweg, Surinam).

Monasa niger CHUBB, Bds. Brit. Guiana, I, 1916, p. 477.

Range: The Guianas, Venezuela and northern Brazil.

†12: Surinam (Javaweg) 2; British Guiana (Potaro 1, Demerara R. 1, "British Guiana" 4), Brazil (Base of Serra da Lua, near Boa Vista, Rio Branco 3; Serra Grande, Rio Branco 1).

Monasa flavirostris *Strickland.* YELLOW-BILLED NUN BIRD.

Monasa flavirostris STRICKLAND, in Jardine's Contr. Orn., 1850, p. 47, pl. 48 (Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 132; GOODFELLOW, Ibis 1902, p. 213 (Coca, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 241 (Rio Purús, Brazil); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 395, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 344 (La Morelia; Florencia; Villavicencio; Buena Vista, Colombia).

Monacha flavirostris SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 149, pl. 49; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 204 (Colombia; Sarayacu, Ecuador; Chyavetas, Peru).

Range: Eastern Peru, Ecuador, western Brazil (Rio Purús) and eastern Colombia.

***Monasa morphœus morphœus** (*Hahn and Küster*). WHITE-BEARDED NUN BIRD.

Bucco morphæus HAHN and KÜSTER, Vog. aus Asien, Lief XIV, 1822, p. 1, pl. 2 ("Brasilien").

Monasa personata VIEILLOT, Gal. Ois., 1820-25, p. 23, pl. 36.

Bucco leucops LICHTENSTEIN, Vers. Doubl., 1823, p. 8 (Brazil).

T[amatia] leucops SWAINSON, Bds. Brazil and Mexico, 1841, pl. 12.

Bucco albifrons SPIX, Av. Bras., I, 1824, p. 53, pl. 41, fig. 1 (Piauhy, Brazil).

Monacha morpheus SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 151, pl. 50; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 204 (Bahia and Lower Amazons).

Monasa morphœus HELLMAYR, Nov. Zool., XII, 1905, p. 297 (Pará); *Id.*, Abh. K. Bayer. Wiss., XXII, 1906, p. 599 (Spix's Types); SNETHLAGE, Bol. Mus., Goeldi, VIII, 1914, p. 241 (Pará; Rio Gaumá; Rio Capim; Rio Acara; Rio Tocantins; Rio Tapajoz, etc.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 394, in key.

Monasa morphœus morphœus HELLMAYR, Nov. Zool., XIII, 1906, p. 381 (Prata Distr., Pará); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Range: Northeastern to southeastern Brazil.

1: "Guiana"=locality?

***Monasa morphœus peruana** (*Sclater*). PERUVIAN WHITE-BEARDED NUN BIRD.

Monasa peruana SCLATER, Proc. Zool. Soc. Lond., 1855, p. 194 (Chamicuros, eastern Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 134; BERLEPSCH, Journ. für Ornith., 1889, p. 309; GOODFELLOW, Ibis, 1902, p. 214 (Coca, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 241 (Rio Purús); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 394, in key (eastern Ecuador, eastern Pèru and Bolivia).

Monacha peruana SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 153, pl. 51; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 205 (Ega, upper Amazons; Chamicuros, east Peru, and Sarayacu, Ecuador).

Monasa morphoeus peruana HELLMAYR, Nov. Zool., XIV, 1907, p. 84, crit. (Teffe, Brazil); *Id.*, XVII, 1910, p. 393 (Borba, Rio Madeira); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 344 (Florencia, Colombia).

Range: Western Brazil, Bolivia,[a] eastern Peru, eastern Ecuador and southeastern Colombia.

1: Peru (Chamicuros).

Monasa fidelis *Nelson*. GOLDMAN'S NUN BIRD.

Monasa fidelis NELSON, Smiths. Misc. Coll., LVI, No. 37, 1912, p. 1 (Cerro Azul, Canal Zone, eastern Panama, 800 ft. alt.); RIDGWAY, Bull. U. S. Nat. Mus. No. 50, VI, 1914, p. 397.

Range: Eastern Panama.

Monasa rikeri *Ridgway*. RIKER'S NUN BIRD.

Monasa rikeri RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 88 (Diamantina, Lower Amazon, Brazil); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 393, in key.

Range: Lower Amazon Valley, Brazil.

***Monasa grandior** *Sclater and Salvin*. COSTA RICAN NUN BIRD.

Monasa grandior SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1868, p. 327 (Angostura, Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 395.

Monacha grandior SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 155, pl. 52; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 205.

Range: Eastern Costa Rica and eastern Nicaragua.

7: Costa Rica (Orosi 4, Siguirres 3).

[a] *Cf.* Ridgway (*l. c.*).

Monasa pallescens pallescens *Cassin.* PALLID NUN BIRD.

Monasa pallescens CASSIN, Proc. Acad. Nat. Sci. Phila., 1860, p. 134 (Cordilleras of the Rio Truando, northwestern Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 397; HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1197 (Juntas, Rio Tamana).

Monasa pallescens pallescens CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 345 (Salaqui; Iguamiando; Baudo; Alto Bonito, Colombia).

Range: Northwestern Colombia (Rio Truando; Truando Falls; Rio Atrato (Ridgway); Atrato and upper San Juan Valleys (Chapman)).

Monasa pallescens sclateri (*Ridgway*). SCLATER'S PALLID NUN BIRD.

Monasa sclateri RIDGWAY, Proc. Biol. Soc. Wash., XXV, 1912, p. 89 ("Bogotá"); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 394, in key.

Monasa pallescens sclateri CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 345 (Puerto Valdivia, and 20 miles west of Honda, Colombia).

Range: Central Colombia ("tropical zone in the lower Cauca and Magdalena Valleys," Chapman).

Monasa pallescens minor *Nelson.* MARRAGANTI NUN BIRD.

Monasa pallescens minor NELSON, Proc. Biol. Soc. Wash., XXVI, 1913, p. 67 (Marraganti, eastern Panama).

Monasa minor RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 398.

Range: Southeastern Panama.

Monasa similis *Nelson.* CERRO AZUL NUN BIRD.

Monasa similis NELSON, Smiths. Misc. Coll., LVI, No. 37, 1912, p. 1 (Cerro Azul, Panama, 800 ft. alt.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 399.

Range: Eastern Panama (Cerro Azul, Canal Zone).

***Monasa nigrifrons** (*Spix*). BLACK-FRONTED NUN BIRD.

Bucco nigrifrons SPIX, Av. Bras., I, 1824, p. 53, pl. 41, fig. 2 ("in sylvis flum. Solimoens").

Monacha nigrifrons SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 159, pl. 54; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 206 (Rio Tocantins; Chapada; Matto Grosso, Brazil; Bolivia; Yquitos; Pebas; Lower Ucayali, Peru).

Lypornix unicolor WAGLER, Syst. Av., 1827, *Lypornix*, sp. 2.

Monasa nigrifrons SCLATER, Ann. & Mag. Nat. Hist., (2), XIII, 1854, p. 481; ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 135 (Matto Grosso); GOODFELLOW, Ibis, 1902, p. 214 (Coca, Ecuador); HELLMAYR, Abh. K. Bayer Akad. Wiss., XXII, 1906, p. 599 (Spix's Types); *Id.*, Nov. Zool., XV, 1908, p. 86 (Goyaz, Brazil); *Id.*, XVII, 1910, p. 393 (Calama, Rio Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 241 (Rio Guamá; Rio Capim; Rio Tocantins; Rio Iriri; Rio Tapajoz; Rio Purús; Rio Jamunda, etc. Brazil); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 345 (La Morelia, southeastern Colombia); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 95 (Pará District).

Range: Central Brazil, westward to Bolivia, Peru, Ecuador and southeastern Colombia.

3: Peru (Lower Huallaga R., 2, Yurimaguas 1).

Genus **CHELIDOPTERA** Gould.

Chelidoptera Gould, Proc. Zool. Soc. Lond., 1836, p. 81 (Type *Cuculus tenebrosus* Pallas).

*Chelidoptera tenebrosa tenebrosa (*Pallas*). SWALLOW-WING.

Cuculus tenebrosus PALLAS, Neue Nord. Beytr., III, 1782, p. 3 (Surinam).

Monasa tenebrosa VIEILLOT, Nouv. Dict. d'Hist. Nat., XXI, 1818, p. 321.

Monasa tenebrio TEMMINCK, Pl. Col. 1825, pl. 323, fig. 1.

Lypornix tenebrosa WAGLER, Syst. Av., 1827, *Lypornix*, sp. 7.

Chelidoptera albipemmis BONAPARTE, Journ. für Ornith., I, 1853, p. 47.

Chelidoptera tenebrosa GOULD, Proc. Zool. Soc. Lond., 1836, p. 81; SCLATER, Mon. Jacamars and Puff-birds, 1882, p. 161, pl. 55, fig. 1 (Merida, Venezuela; British Guiana; Surinam; Cayenne; Yquitos, Yurimaguas and Xeberos, Peru; Rio Negro, Brazil); *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 207 (Pará and Matto Grosso, Brazil, etc., etc.); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 103 (Altagracia; Ciudad Bolivar, etc.; Orinoco region, Venezuela); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 242 (Pará to Rio Purús, many localities); CHUBB, Bds. British Guiana, I, 1916, p. 478.

Chelidoptera tenebrosa tenebrosa HELLMAYR, Nov. Zool., XIII, 1906, p. 381 (Prata Dist. Pará); *Id.*, XIV, 1907, p. 401 (Humaytha, Rio Madeira); *Id.*, XV, 1908, p. 86 (Goyaz); *Id.*, XVII, 1910, p. 395 (Rio Madeira); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., Vol. 2, No. 6, 1916, p. 322 (Breeding habits, etc., Munduapo, R. Orinoco, Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 55 (Paramaribo; Javaweg, etc., Surinam).

Range: The Guianas, Venezuela, southeastern Colombia, eastern Peru, and central and northern Brazil east to Pará.

†19: British Guiana (Potaro 1, Mazaruni R., 2); Surinam (Paramaribo) 2; Peru (Rioja 5, Yurimaguas 3, Moyobamba 4); Brazil (Boa Vista, Rio Branco) 2.

*Chelidoptera tenebrosa pallida[a] *Cory*. BANDED SWALLOW-WING.

Chelidoptera tenebrosa pallida CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1913, p. 288 (Empelado Savanna, 30 miles east of Maracaibo, northwestern coast of Venezuela).

Range: Coast region of northwestern Venezuela.

4: Venezuela (Empelado Savanna, 30 miles east of Maracaibo, northwestern coast).

[a] *Chelidoptera tenebrosa pallida* CORY: Similar to *C. tenebrosa tenebrosa*, but the chestnut abdomen paler. Black of the breast shading into slaty gray on lower part and separated from the rufous chestnut of the abdomen by a well defined band of white; cubital edge of wing tinged with rufous chestnut. Wing, 112; tail, 58; culmen, 16.

***Chelidoptera tenebrosa brasiliensis** (*Sclater*). SOUTHERN SWALLOW-WING.

Chelidoptera brasiliensis SCLATER, Cat. Am. Bds., 1862, p. 275 (southeastern Brazil); *Id.*, Mon. Jacamars and Puff-birds, 1882, p. 165, pl. 55, fig. 2 (Bahia; Minas Geraes; Pernambuco)[a]; *Id.*, Cat. Bds. Brit. Mus., XIX, 1891, p. 208 (Bahia; Minas Geraes; Rio Claro; Goyaz)[a]; NICOLL, Ibis, 1904, p. 40 (Bahia and Itaparica).

Chilidoptera tenebrosa brasiliensis ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 135 (Matto Grosso); VON IHERING, Revis. Mus. Paulista, V, 1902, p. 281 (Bahia); HELLMAYR, Nov. Zool., XIII, 1906, in text; *Id.*, XV, 1908, p. 86, in text.

Range: Southeastern Brazil.

2: Brazil (near Lagoa Santa, Minas Geraes).

Suborder PICI.

Family PICIDÆ. Woodpeckers, etc.

Subfamily Picinæ.

Genus COLAPTES Vigors.

Colaptes Vigors, Trans. Linn. Soc. Lond., pt. III, 1825, p. 457, footnote (Type, by original designation, *Cuculus auratus* Linnæus).

***Colaptes auratus auratus** (*Linnæus*). FLICKER.

Cuculus auratus LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 112 (Carolina).

Picus auratus LINNÆUS, Syst. Nat., ed. 12, 1766, p. 174.

Colaptes auratus BAIRD, BREWER and RIDGWAY, Hist. N. A. Bds., II, 1874, p. 575, part, pl. 55, figs. 1-2; HARGITT, Cat. Bds. Brit. Mus., XVII, 1890, p. 12, part.

Colaptes auratus auratus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 14.

Range: Southeastern United States from Florida and the Gulf Coast, north to North Carolina and west to southwestern Indiana, southern Illinois, southeastern Missouri, and central Texas.

†21: Florida (Juno 1, Dunedin 1, Tampa 1, Starke 1, W. Jupiter 7, Gainesville 2, Lake Worth 1, New River 1, Punta Rassa 1, Pine Island 2); Mississippi (Holley Springs) 2; Illinois (Mound City) 1.

Colaptes auratus luteus[b] *Bangs*. NORTHERN FLICKER.

[a] Sclater records *C. t. brasiliensis* from Pernambuco and Goyaz, but Hellmayr has recorded *C. t. tenebrosa* from Goyaz. It is probable that typical *brasiliensis* is confined to southeastern Brazil.

[b] Hybrids of *Colaptes auratus luteus* and *Colaptes cafer collaris* have been named by various authors, among which are the following: *Picus ayresii* AUDUBON, Bds. Am., Oct. ed., VII, 1844, p. 348, pl. 494 (Upper Missouri R.); *Colaptes hybridus* BAIRD, Rep. Pacific R. R. Surv., IX, 1858, p. 122 (Valleys of Upper Missouri and Yellowstone Rivers); *Picus hybridus aurato-mexicanus* SUNDEVALL, Consp. Picinarum, 1866, p. 72.

Colaptes auratus luteus BANGS, Auk, 1898, p. 177 (Waterloo, Massacuhsetts); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 18.

Range: Northern and central United States, east of the Rocky Mountains (except in Minnesota, North Dakota, eastern Montana and northeastern Wyoming), south to Virginia, northern Alabama, Kentucky, southern Illinois, and Missouri. In winter to the Gulf Coast and southern Texas.

†33: Maine (New Vineyard) 1; Vermont 1; Massachusetts (Chatham 1, Great Island, Hyannis 1); Indiana (Bluffton) 1; Illinois (Joliet 5, Fox Lake 2, Des Plaines River 1, Chicago 2); Connecticut (E. Hartford) 3; Wisconsin (Plymouth 1, Beaver Dam 13); Iowa (Knoxville) 1.

***Colaptes auratus borealis** *Ridgway*. BOREAL FLICKER.

Colaptes auratus borealis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 31 (Nulato, lower Yukon R., Alaska); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 20; Grinnell, Pacific Coast Avi., No 11, 1915, p. 82 (California records).

Range: Northern North America, east of the Rocky Mountains, from Quebec and northern Ontario, northward to the limit of trees (Labrador, northern Ungava, Mackenzie, etc.), and extending northwestward to northern Alaska and southward in the United States to Minnesota, North Dakota, eastern Montana and eastern Wyoming; occasional in winter to California; accidental in Greenland and Pribilof Islands.

3: Canada (Prince Albert, Saskatchewan) 1; California (San Francisco) 2.

***Colaptes chrysocaulosus chrysocaulosus** *Gundlach*. CUBAN FLICKER.

Colaptes chrysocaulosus GUNDLACH, Ann. Lyc. Nat. Hist. N. Y., VI, 1858, p. 273 (Cuba)[a]; *Id.*, Journ. für Ornith., 1874, p. 153; CORY, Auk, 1886, p. 333; *Id.*, Bds. West Indies, 1889, p. 175; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 15; CHAPMAN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 301.

Colaptes chrysocaulosus chrysocaulosus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 23.

Range: Island of Cuba.

5: Cuba (E. Cuba 1, "Cuba" 3, San Diego de los Baños, W. Cuba 1).

***Colaptes chrysocaulosus gundlachi** (*Cory*). GRAND CAYMAN FLICKER.

Colaptes gundlachi CORY, Auk, 1886, p. 498 (Grand Cayman I., West Indies); *Id.*, Bds. West Indies, 1889, p. 175; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 15; NICOLL, Ibis, 1904, p. 584, crit.; LOWE, Ibis, 1909, p. 341; *Id.*, 1911, p. 150.

[a] It is probable that the type came from somewhere in eastern Cuba. Dr. Gundlach informed me that he had secured many species of birds in eastern Cuba (especially in the vicinity of Santiago de Cuba and Guantanamo) in early days before he went to live at Ingenio Fermina, Bemba, a few miles from Havana. It is worthy of note that the type of *Culicivora* [*Polioptila*] *lembeyéi*, described at the same time, came from eastern Cuba.

Colaptes chrysocaulosus gundlachi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 25; BANGS, Bull. Mus. Comp. Zool., LX, 1916, p. 310.

Range: Grand Cayman Island, south of Cuba.

†21: Grand Cayman Island.

***Colaptes chrysoides chrysoides** (*Malherbe*). GILDED FLICKER.

Geopicus (*Colaptes*) *chrysoides* MALHERBE, Rev. et Mag. de Zool., IV, 1852, p. 553 ("America" = Cape San Lucas, Lower California).[a]

Geopicus chrysoides MALHERBE, Mon. Picidae, IV, 1862, p. 261, pl. 109, figs. 1, 4.

Colaptes chrysoides BAIRD, Proc. Acad. Nat. Sci. Phila., 1859, p. 302 (Cape San Lucas); BAIRD, BREWER and RIDGWAY, Hist. N. A. Bds., II, 1874, p. 583, pl. 54, fig. 2, part; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 16, part; BREWSTER, Bull. Mus. Comp. Zool., XLI, 1902, p. 108 (Cape San Lucas dist.; crit.).

Colaptes chrysoides chrysoides GRINNELL, Pacific Coast Avif., No. 3, 1902, p. 78, part; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 25.

Range: Southern Lower California.

1: Lower California (Santiago).

Colaptes chrysoides brunnescens *Anthony*. SAN FERNANDINO GILDED FLICKER.

Colaptes chrysoides brunnescens ANTHONY, Auk, 1895, p. 347 (San Fernandino, northwestern Lower California); THAYER and BANGS, Condor, IX, 1907, p. 136 (Rosario; Santa Ana; San Javier; San Rosarito, Lower California, crit.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 27.

Range: Pacific Coast region of northern Lower California.

***Colaptes chrysoides mearnsi** *Ridgway*. MEARN'S GILDED FLICKER.

Colaptes chrysoides mearnsi RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 32 (Quitovaquita, Arizona); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 28.

Colaptes chrysoides (*nec Geopicus chrysoides* Malherbe) of modern authors.

Range: Southern Arizona and southeastern California to southern Sonora, Mexico.

3: Arizona (Camp Lowell 1, Phoenix 1, Tempe 1).

Colaptes cafer cafer (*Gmelin*). NORTHWESTERN FLICKER.

(*Picus*) *cafer* GMELIN, Syst. Nat., I, 1788, p. 431 (Cape of Good Hope, *errore* = Nootka Sound, Vancouver I.)[b].

Colaptes mexicanus saturatior RIDGWAY, Proc. Biol. Soc. Wash., II, 1884, p. 90 (Neah Bay, state of Washington).

Colaptes cafer saturatior RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 36.

Range: Northwest coast district from northern California (Humboldt Bay, etc.) to southern Alaska (Sitka, Etolin Is., etc.).

[a] Type locality as fixed by Anthony, Auk, 1895, p. 347.

[b] Changes of type locality, nomenclature, etc., recommended by T. S. Palmer Auk, 1916, p. 322.

***Colaptes cafer collaris** (*Vigors*). RED-SHAFTED FLICKER.

Colaptes collaris VIGORS, Zool. Journ., IV, 1829, p. 354 (Monterey, California).
Colaptes cafer collaris NELSON, Auk, 1900, p. 123, crit.; Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 33.

Range: Western United States and southwestern British Provinces (except coast district from northern California, northward); British Colombia (east of the Rocky Range), east to the Great Plains (and casually farther east to Iowa, Kansas, etc.), southward to northern Mexico and northern Lower California (San Pedro Martir Mountains, etc.).

†38: Colorado (Rocky Ford 1, Hot Sulphur Springs 1, Rouett Co. 1); New Mexico (Members 2, Deming 2, Rincon 4); Arizona (Huachuca Mts. 3, Phoenix 1); California (Monterey 9, Santa Monica 1, Miller 1, Orange 1, Los Gatos 1, Clipper Gap 6, Tres Pinos 1, San Francisco 2, Palo Alto 2).

***Colaptes cafer mexicanus** (*Swainson*).[a] MEXICAN RED-SHAFTED FLICKER.

Colaptes mexicanus SWAINSON, Philos. Mag., N. S., I, 1827, p. 440 (Real del Monte, Hidalgo, Mexico).
Colaptes cafer cafer RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 29, and of modern authors.

Range: Central and southern Mexico (southern Tamaulipas, Aguas Calintes, etc.) and Chihuahua? southward to Guerro, Oaxaca, etc.).

5: Mexico (Coyotes, Durango 1; Chihuahua 4).[b]

***Colaptes cafer rufipileus** (*Ridgway*). GUADELUPE FLICKER.

Colaptes mexicanus rufipileus RIDGWAY, Bull. U. S. Geol. & Geog. Surv. Terr., II, 1876, p. 191 (Guadelupe Island, Lower California).
Colaptes rufipileus, Am. Orn. Union Check List, 3rd ed., 1910, p. 195.
Colaptes cafer rufipileus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 37.

Range: Guadelupe Island, west of Lower California.

2: Guadelupe Island (specimens mounted).

***Colaptes mexicanoides** *Lafresnaye*. GUATEMALAN FLICKER.

Colaptes mexicanoides LAFRESNAYE, Rev. Zool., VII, 1844, p. 42 ("Mexico"); SALVIN and GODMAN, Ibis, 1892, p. 327 (Matagalpa, Nicaragua); *Id.*, Biol. Centr.-Am., Aves, II, 1895, p. 404; DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 94 (Lake Atitlan and Tecpam, Guatemala; breeding; crit.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 37.
Colaptes submexicanus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 21.

[a] *Cf.* Palmer, Auk, 1916, p. 322.

[b] Specimens from Chihuahua are apparently intermediate, but in size approach *mexicanus*.

Picus rubricatus WAGLER, Isis, 1829, p. 516, part (female).
Geopicus rubricatus MALHERBE, Mon. Picidae, II, 1862, p. 265, pl. 110, figs. 1-2.

Range: Guatemala and extreme southern Mexico (Chiapas), Nicaragua (Matagalpa).[a]

6: Guatemala (Sierra, St. Elena 2, Tecpam 3, Lake Atitlan 1).

Genus **SOROPLEX** Gloger.

Soroplex Gloger, Hand- und Hilfsbuch der Naturg., 1842, p. 198 (Type *Picus campestris* Vieillot).

Soroplex campestris campestris (*Vieillot*). PAMPAS FLICKER.

Picus campestris VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 101 (Paraguay); SPIX, Av. Bras., I, 1824, p. 57, pl. 46 (female).
Picus chrysosternus SWAINSON, Mem. Wern. Soc., III, 1821, p. 288 (female).
Chrysoptilus campestris SWAINSON, Classif. Bds., II, 1837, p. 308.
Geopicus campestris MALHERBE, Mon. Picidae, II, 1862, p. 251, pl. 108, figs. 1-2.
Pedeopipo campestris PELZELN, Orn. Bras., 1871, p. 249.
Colaptes campestris HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 23; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 603; *Id.*, Nov. Zool., XV, 1908, p. 79 (Goyaz); CHUBB, Ibis, 1910, p. 277 (Sapucay, Paraguay); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 244 (Monte Alegre; Maranhão, Brazil).

Range: Greater portion of Brazil, Bolivia, Paraguay, and Uruguay to N. Argentina.

*Soroplex campestris cearæ *subsp. nov.*[b] CEARÁ FLICKER.

Range: Northeastern Brazil (Prov. of Ceará).

2: Brazil (Quixada, Ceará) ♂ & ♀, including the type.

*Soroplex campestroides (*Malherbe*). FIELD FLICKER.

Geopicos campestroides MALHERBE, Rev. et Mag. de Zool., 1849, p. 514 (south Brazil).
Geopicos agricola MALHERBE, N. Classif. Men. Acad. Metz, 1849, p. 359.
Colaptes australis BURM., Journ. für Ornith., 1860, p. 244.
Geopicus agricola MALHERBE, Mon. Picidæ, II, 1862, p. 254, pl. 108, figs. 4-5.
Colaptes agricola SCLATER and HUDSON, Argentine Orn., II, 1889, p. 24; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 25; KERR, Ibis, 1901, p. 228 (Paraguay); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 226 (La Soledad, Mocovi [Chaco], Argentina); CHUBB, Ibis, 1910, p. 277 (Paraguay);

[a] I have not seen specimens from Nicaragua.

[b] *Soroplex campestris cearae* subsp. nov.: Type from Quixada, Ceará, northeastern Brazil; male, No. 47243, Field Museum of Natural History. Collected by Mr. R. H. Becker, June 25, 1913.
Similar to *S. campestris campestris*, but smaller; upper parts paler with the pale bands more whitish and wider; under parts with slight wash of yellow and the dark bands very much narrower, those on the chest reduced to small arrow-shaped spots. Wing, 143; tail, 115; bill, 35 mm.

GRANT, Ibis, 1911, p. 320 (N. Argentina); DABBENE, An. de Mus. Nat. Buenos Aires, I, 1910, p. 274.

Colaptes campestroides DABBENE, Bol. Soc. Physis. I, No. 6, 1914, p. 323, crit.

Range: Southern Brazil, Paraguay, Uruguay, Patagonia and Argentina.

2: Argentina.

***Soroplex rupicola** (*d'Orbigny*). ROCK FLICKER.

Colaptes rupicola d'ORBIGNY, Voy. Amer. Merid., Ois., 1835-44, p. 377, pl. 62, fig. 1 (Cochabamba, Bolivia); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 26; LÖNNBERG, Ibis, 1897, p. 449 (Moreno on the Puna de Jujuy, Argentina); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 226 (Tucuman, Argentina); DABBENE, Anal. de Mus. Nat. Buenos Aires, I, 1910, p. 274 (Tucuman).

Geopicus rupicola MALHERBE, Mon. Picidæ, 1862, II, p. 271, part, pl. 113, fig. 2 (female).

Range: Bolivia and northern Argentina (Tucuman).

3: Argentina (Cerro Munas 1, Alto del Pelado, Prov. Tucuman 2).

***Soroplex puna** (*Cabanis*). ANDEAN FLICKER.

Colaptes puna CABANIS, Journ. für Ornith., 1883, p. 98 (western Peru); TACZANOWSKI, Orn. Pérou, III, 1886, p. 94; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 27 (Tinta, and Andes of Lima, Peru).

Range: Andes of Peru.

3: Peru (Junin).

***Soroplex cinereicapillus** (*Reichenbach*). ASH-HEADED FLICKER.

Colaptes cinereicapillus REICHENBACH, Scans. Picinæ, 1854, p. 416, No. 978b, pl. DCLXXX, figs. 4489-4490 (Peru); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 27 (Cutevo, Peru).

Colaptes stolzmanni TACZANOWSKI, Orn. Pérou, III, 1886, p. 92.

Range: Northern Peru.

4: Peru (Cajamarca 1, northeast of Otuzco 2, Mts. east of Balsas 1).

Genus **PITUIPICUS** Bonaparte.

Pituipicus Bonaparte, Ateneo Italiano, II, 1854, p. 126 (Type *Picus chilensis* Garnot and Lesson = *Picus pitius* Molina).

***Pituipicus pitius** (*Molina*). CHILIAN FLICKER.

Picus pitius MOLINA, Sagg. Stor. Nat. Chile, 1782, p. 209 (Chili).

Picus chilensis GARNOT and LESSON, Voy. Coq., I, 1826, p. 241, pl. XXXII (immature female).

Colaptes chilensis VIGORS, Zool. Beechey's Voy., 1839, p. 24.

Geopicus chilensis MALHERBE, Mon. Picidæ, II, 1862, p. 269, pl. CXI, figs. 4-5.

Colaptes pitius BONAPARTE, Consp. Gen. Av., I, 1850, p. 114; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 28; LANE, Ibis, 1897, p. 47 (Coiral, Arauco and Calle Calle, Chile); DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 323 (Central Patagonia and western Chibut, Argentina).

Range: Chile and western Argentina.

1: Chile (Rancagua).

Genus **NESOCELEUS** Sclater and Salvin.

Nesoceleus Sclater and Salvin, Nomen. Avium Neotropicalum, 1873, pp. 101, 155 (Type *Colaptes fernandinæ* Vigors).

*Nesoceleus fernandinæ (*Vigors*). FERNANDINA'S FLICKER.

Colaptes fernandinæ VIGORS, Zool. Journ., III, 1827, p. 445 (near Havana, Cuba); D'ORBIGNY, in La Sagra's Hist. Fis. Nat. Cuba, Aves, 1839, p. 112, pl. 24; GUNDLACH, Journ. für Ornith., 1874, p. 155.

Geopicus fernandinæ MALHERBE, Mon. Picidæ, II, 1862, p. 273; IV, 1862, pl. 113, figs. 4-5.

Nesoceleus fernandinæ CORY, Auk, 1886, p. 380; *Id.*, Bds. West Indies, 1889, p. 176; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 419; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 40.

Range: Island of Cuba.

3: Cuba.

Genus **HYPOXANTHUS** Bonaparte.

Hypoxanthus Bonaparte, Consp. Volucr. Zygod., 1854, No. 228 (Type *Picus rivolii* Boissonneau).

*Hypoxanthus rivolii (*Boissonneau*). RIVOLI WOODPECKER.

Picus rivolii BOISSONNEAU, Rev. Zool., 1840 (Jan.) p. 36 (Colombia = Chipaque, alt. 9500 ft., 15 miles east of Bogotá).[a]

Picus elegans (*nec* Swainson, 1827) FRASER, Proc. Zool. Soc. Lond., 1840 (July), p. 60 (Bogotá).

Geopicus rivolii MALHERBE, Mon. Picidæ, II, 1862, p. 267, pl. 112, figs. 1-2.

Hypoxanthus rivolii HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 30.

Hypoxanthus rivolii rivolii CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 345 (El Pinon; Subia, near Bogotá; Palo Hueco; Cundinamarca; Chipaque, Colombia).

Range: Eastern Colombia and western Venezuela (Merida).[b]

7: Colombia (Paramo de Tama, near Venezuelan line 3; "Colombia" 1); Venezuela (Paramo de Tama, near Colombian line) 3.

[a] Type locality as suggested by Chapman, *l. c.*

[b] According to Chapman (*l. c.*), Merida specimens approach nearer to *brevirostris* than to typical *rivolii*. I have not seen specimens from that region.

***Hypoxanthus rivolii brevirostris** (*Taczanowski*). SHORT-BILLED RIVOLI WOODPECKER.

Hypoxanthus brevirostris TACZANOWSKI, Proc. Zool. Soc. Lond., 1874, p. 446 (Higos and Chilpes, Peru); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 31.

Hypoxanthus rivolii brevirostris BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1884, p. 307; TACZANOWSKI, Orn. Pérou, III, 1886, p. 90; MENEGAUX, Bull. Mus. d'Hist. Nat. Paris, 1910, No. 5, p. 363 (Peru); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 346 (Laguneta; Santa Isabel; Volcancito; El Eden, Colombia).

Range: Peru, Ecuador and central Colombia.

1: Ecuador?

Hypoxanthus atriceps *Sclater and Salvin*. BLACK-HEADED WOODPECKER.

Hypoxanthus atriceps SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1876, p. 254 (Huasampilla, Peru); *Id.*, 1879, p. 632; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 32 (Ramosani and Tilotilo, Prov. Yungas, Bolivia; Huasampilla, Peru).

Range: Bolivia and Peru (Huasampilla).

Genus **MELANERPES** Swainson.

Melanerpes Swainson, Fauna Bor. Am., II, 1831, p. 316 (Type, by original designation, *Picus erythrocephalus* Linnæus).

***Melanerpes erythrocephalus** (*Linnæus*). RED-HEADED WOODPECKER.

Picus erythrocephalus LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 113 (Carolina).

Melampicus erythrocephalus MALHERBE, Mon. Picidæ, II, 1862, p. 209; IV, 1862, pl. 97, figs. 1, 2, 3.

Melanerpes erythrocephalus BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 564, pl. 54, fig. 4; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 145; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 42; SWARTH, Cooper Orn. Club, Pacific Coast Avi., No. 10, 1914, p. 34 (Chiricahua Mts., Arizona).

Range: North America from southeastern British Columbia, southern Alberta, Manitoba and Ontario, south to the Gulf coast, and from central Montana, central Colorado and central Texas, east to the Atlantic coast. Common to northern New York and Valleys of the Hudson and Delaware Rivers, but rare and local in New England; casual in Arizona, New Mexico, Utah, Nova Scotia and New Brunswick.

†51: Maine 1; Massachusetts (Great Island, Hyannis) 2; New Jersey (Englewood) 1; Florida (Gainesville 3, New River 2, Town Point 1);

Ohio (Columbus) 1; Wisconsin (Beaver Dam 10, Milton 1); Illinois (Chicago 7, Joliet 9, Fox Lake 1, Des Plaines River 2, Glen Ellyn 1, Olive Branch 1, Grand Chain 2); Indiana (Bluffton) 1; Colorado (Maxwell 1, Fort Lyon 3); Texas 1.

***Melanerpes portoricensis** (*Daudin*). PORTO RICAN WOODPECKER.

Picus portoricensis DAUDIN. Ann. Mus. d'Hist. Nat., II, 1803, p. 286, pl. 51 (Porto Rico).

Melanerpes portoricensis CASSIN, Proc. Acad. Nat. Sci., Phila., 1860, p. 377 (St. Thomas); GUNDLACH, Journ. für Ornith., 1874, p. 312; *Id.*, 1878, p. 160; CORY, Auk, 1886, p. 377; *Id.*, Bds. West Indies, 1889, p. 172; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 159 (Porto Rico and Vieques I.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 47; WETMORE, Bull. 326, U. S. Dept. Agric., 1916, p. 62 (Porto Rico and Vieques I.).

Range: Islands of Porto Rico, Vieques and St. Thomas;[a] Greater Antilles.

†20: Porto Rico (Mayaguez 8, "Porto Rico" 12).

Genus **CENTURUS** Swainson.

Centurus Swainson, Classif. Bds., II, 1837, p. 310 (Type, by monotypy, *Picus carolinus* Linnæus).

***Centurus carolinus** (*Linnæus*). RED-BELLIED WOODPECKER.

Picus carolinus LINNÆUS, Syst. Nat. ed., 10, I, 1758, p. 113 (Carolina); AUDUBON, Orn. Biog., V, 1839, p. 169, pl. 415, fig. 3, pl. 416, fig. 4.

Centurus carolinus BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 554, pl. 52, figs. 1, 4; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 55.

Melanerpes carolinus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 170.

Range: Eastern United States and southwestern Ontario from southern Michigan, southern Wisconsin, southeastern Minnesota and northern New York, south to the Gulf coast and southern Florida; west to southeastern South Dakota, eastern Nebraska, eastern Kansas and west-central Texas; irregular in the extreme northern part of its range, and casual on the middle Atlantic coast (Massachusetts, Connecticut, etc.) and Colorado; accidental in Arizona (Fort Grant).

†67: North Carolina (Raleigh 1, Monroe Co. 1); New York (York) 1; Florida (Enterprise 3, Pine Island 1, Town Point 4, Palm Beach 1, Dunedin 1, West Jupiter 10, Mary Ester 2, Lantana 2, New River 2, Lake Worth 1, Key West 3, Stark 1); Ohio (Garretsville) 2; Tennessee (Waverly 1, Pomona 1); Indiana (Bluffton 2, Wheatland 1); Illinois

[a] I have not seen specimens from St. Thomas and its occurrence there requires confirmation.

(Grand Chain 7, Henry 2, Olive Branch 2, Mound City 1, Chicago 1, Meredosia 1); Wisconsin (Beaver Dam) 1; Iowa (Knoxville 1, Hillsboro 1); Arkansas (Stuttgart) 1; Mississippi (Vicksburg) 2; Louisiana (Buros) 4; Texas (Ft. Worth) 2.

***Centurus superciliaris superciliaris** (*Temminck*). SUPERCILIARY WOODPECKER.

Picus superciliaris TEMMINCK, Pl. Col., 73 livr., 1827, pl. 433 and text (Cuba).
Colaptes superciliaris D'ORBIGNY in La Sagra's Hist. Nat. Cuba, Aves, 1839, p. 111, pl. 23 (albino); LEMBEYE, Av. de Isla de Cuba, 1850, p. 131.
Zebrapicus superciliaris MALHERBE, Mon. Picidæ, II, 1862, p. 223; IV, 1862, pl. 102, figs. 1, 2, 3.
Melanerpes superciliaris HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 167; CORY, Cat. West Ind. Bds., 1892, pp. 12, 104.
Centurus superciliaris CORY, Bds. West Indies, 1889, p. 174; *Id.*, Auk, 1886, p. 379; CHAPMAN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 301.
Centurus superciliaris superciliaris RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 59.

Range: Island of Cuba.
†15: Cuba (San Diego de los Baños 3, "Cuba" 12).

Centurus superciliaris merceus *Bangs*. ISLE OF PINES WOODPECKER.

Centurus superciliaris merceus BANGS, Proc. Biol. Soc. Wash., XXIII, 1910, p. 173 (San Juan, Isle of Pines); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 61; TODD, Ann. Carnegie Mus., X, 1916, p. 241.

Range: Isle of Pines, near Cuba.

***Centurus blakei blakei** *Ridgway*. BLAKE'S WOODPECKER.

Centurus blakei RIDGWAY, Auk, 1886, p. 337 (Abaco I., Bahamas); CORY, Bds. West Indies, 1889, p. 296.
Melanerpes blakei HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 168.
Centurus nyeanus blakei TODD, Ann. Carnegie Mus., VII, 1911, p. 422.
Centurus blakei blakei RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 61.

Range: Island of Abaco, Bahamas.
4: Abaco I., Bahamas.

***Centurus blakei bahamensis** (*Cory*). BAHAMA WOODPECKER.

Centurus bahamensis CORY, Auk, 1892, p. 270; (Great Bahama I., Bahamas); *Id.*, Cat. West Ind. Bds., 1892, pp. 12, 104, 126, 127, 143.
Centurus blakei bahamensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 63.

Range: Great Bahama Island, Bahamas.
6: Great Bahama Island (including the type).

Centurus nyeanus *Ridgway*. NYE'S WOODPECKER.

Centurus nyeanus RIDGWAY, Auk, 1886, p. 336 (Watlings Island, Bahamas); CORY, Bds. West Indies, 1889, p. 295; RILEY, Auk, 1903, p. 434; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 65.

Melanerpes nyeanus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 169; CORY, Cat. West Ind. Bds., 1892, pp. 12, 104, 126, 127, 142.

Range: Watlings Island, Bahamas.

***Centurus caymanensis** *Cory*. CAYMAN WOODPECKER.

Centurus caymanensis CORY, Auk, 1886, p. 499 (Grand Cayman, West Indies); *Id.*, 1888, p. 158; *Id.*, Bds. West Indies, 1889, p. 295; LOWE, Ibis, 1909, p. 341; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 65; BANGS, Bull. Mus. Comp. Zool., 1916, p. 311.

Melanerpes caymanensis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 169; NICOLL, Ibis, 1904, p. 584; LOWE, Ibis, 1911, p. 150.

Range: Grand Cayman Island, south of Cuba.

†61: Grand Cayman Island (including the type).

***Centurus dubius dubius** (*Cabot*). UXMAL WOODPECKER.

Picus dubius CABOT, Proc. Bost. Soc. N. H., I, 1844, p. 164 (Uxmal, Yucatan).

Melanerpes dubius HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 172, part.

Centurus dubius STONE, Proc. Acad. Nat. Sci. Phila., 1890, p. 206 (Yucatan).

Centurus dubius dubius RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 66; BANGS, Auk, 1915, p. 168 (List Cabot's types).

Range: Southeastern Mexico (Campeche, Yucatan), British Honduras and adjacent lowlands of Guatemala.

5: Yucatan.

Centurus dubius veræcrucis (*Nelson*). VERA CRUZ WOODPECKER.

Melanerpes dubius veræcrucis NELSON, Auk, 1900, p. 259 (Coatzocoalcos, Vera Cruz).

Centurus dubius veræcrucus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 69.

Range: Southeastern Mexico in states of Vera Cruz, Oaxaca, Tabasco and Chiapas and adjacent parts of Guatemala.

Centurus dubius leei (*Ridgway*). LEE'S WOODPECKER.

Centurus leei RIDGWAY, Proc. Biol. Soc. Wash., III, 1885, p. 22 (Cozumel Island, Yucatan).

Centurus dubius leei RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 69.

Range: Cozumel Island and Meco Island, Yucatan.

***Centurus dubius canescens** (*Salvin*). RUATAN WOODPECKER.

Centurus canescens SALVIN, Ibis, 1889, p. 370 (Ruatan Island, Honduras).

Melanerpes canescens HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 174.
Centurus dubius canescens RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 70.

Range: Ruatan Island, Bay of Honduras.

2: Ruatan Island.

***Centurus rubriventris rubriventris** *Swainson.* SWAINSON'S WOODPECKER.

Centurus rubriventris SWAINSON, Anim. in Menag., 1838, p. 354 (no locality = Merida, Yucatan)[a].
Melanerpes rubriventris HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 176, part (Merida and Peto, Yucatan); CHAPMAN, Bull. Am. Mus. Nat. Hist., VIII, 1896, p. 285 (Chichen-Itza, Yucatan).
Centurus rubriventris rubriventris RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 70.

Range: Yucatan; Bonaca Island?

4: Yucatan.

***Centurus rubriventris pygmæus** *Ridgway.* LESSER COZUMEL WOODPECKER.

Centurus rubriventris pygmæus RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1885, p. 576 (Cozumel Island, Yucatan); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 72.

Range: Cozumel Island, Yucatan.

2: Cozumel Island.

***Centurus subelegans subelegans**[b] *Bonaparte.* BONAPARTE'S WOODPECKER.

Centurus subelegans BONAPARTE, Proc. Zool. Soc. Lond., 1837, p. 109 ("Mexico," *i. e.*, Venezuela).[c]
Centurus terricolor BERLEPSCH, Ibis, 1880, p. 113 (Orinoco district or Trinidad).
Melanerpes terricolor HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 176 (Venezuela; Tobago; CORY, Auk, 1893, p. 220 (Tobago); BERLEPSCH and HARTERT, Nov. Zool., 1902, p. 92 (Maipures; Altegracia; Caicara, Venezuela); LOWE, Ibis, 1907, p. 560 (Margarita); *Id.*, 1909, p. 322 (Cariaco Peninsula, Venezuela).
Melanerpes subelegans RICHMOND, Proc. U. S. Nat. Mus., XVIII, 1896, p. 666 (Margarita I.); CORY, Field Mus. Pub., No. 137, 1909, p. 244 (Margarita).

[a] By designation.

[b] HELLMAYR and SEILERN (Arch. für Naturg., 1912, p. 150) do not accept Bonaparte's name, *subelegans*, for this species on account of uncertainty of type locality, description, etc., but Richmond's claim in its favor (Proc. U. S. Nat. Mus., XVIII, 1896, p. 666) seems worthy of consideration. Furthermore, the bird with barred upper tail coverts (*terricolor* Berlepsch) may ultimately be found worthy of subspecific recognition.

[c] See Bonaparte, Consp. Av., I, 1850, p. 119. I suggest Caracas, Venezuela, for the type locality.

Centurus subelegans subelegans RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 52, in key; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, 1916, p. 305 (Ciudad Bolivar and Caicara).

Melanerpes terricolor terricolor HELLMAYR and SEILERN, Arch. für Naturg., Abt. A, 5 Heft, 1912, p. 150 (Cumbre Chiquita, S. Esteban).

Range: Venezuela; Margarita Island; Tobago Island; Trinidad?; British Guiana?

†45: Venezuela (Macuta, Caracas 14, Cumana 3, Maracay, Aragua 6, Puerto Cabello 1, La Ceiba, Trujillo 1); Tobago I. 6; Margarita I. 13; "Trinidad" (purchased) 1.

***Centurus subelegans rubricapillus**[a] (*Cabanis*). RED-CROWNED WOODPECKER.

Centurus rubricapillus CABANIS, Journ. für Ornith., X, 1862, p. 328 (Barranquilla, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 53, footnote.

Picus tricolor (*nec* Gmelin) WAGLER, Isis, 1829, p. 512 ("Mexico"=Cartagena, Colombia).

Melanerpes tricolor HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 174.

Zebrapicus tricolor MALHERBE, Mon. Picidæ, 1862, p. 247, part; IV, 1862, pl. 106, figs. 1-2.

Melanerpes subelegans neglectus RICHMOND, Proc. U. S. Nat. Mus., XVIII, 1896, p. 668 (Bogotá).

Melanerpes wagleri sanctæ-martæ BANGS, Proc. Biol. Soc. Wash., XII, 1898, p. 134 (Santa Marta, Colombia).

Centurus subelegans neglectus RIDGWAY, Bull U. S. Nat. Mus., No. 50, VI, 1914, p. 52, in key.

Centurus subelegans sanctæ-martæ RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 53, in key.

Melanerpes rubricapillus rubricapillus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 351 (Upper Sinu River; Algodonal; Magdalena River; Honda; Chicoral, Colombia).

Melanerpes wagleri SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 416 (Lion Hill, Panama).

Melanerpes subelegans wagleri RICHMOND, Proc. U. S. Nat. Mus., XVIII, 1896, p. 668 (Panama and coast of Colombia).

Centurus subelegans wagleri RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 73; STONE, Proc. Acad. Nat. Sci. Phila., 1918, p. 259 (Panama).

Range: Costa Rica, Panama, Colombia and western Venezuela.

[a] I am unable to verify the characters claimed to distinguish *wagleri* or *neglectus* and am inclined not to recognize any of the supposed subspecies. Birds from Tobago, Margarita and northeastern Venezuela very often have the rump and upper tail coverts conspicuously spotted or barred (=*terricolor* Berlepsch), but others from the same localities do not. The red crown (continuous or broken) is another variable character, as is also the marking on the middle rectrices. There is considerable difference in size, especially in length of wing (often in birds from the same locality), but it is variable and appears to have no geographical significance. The best that can be said is that the differences given by Ridgway (*l. c.*, in key, pp. 52–53) for *subelegans* and *sanctæ-martæ* (=*rubricapillus*) may serve as average characters to distinguish the majority of specimens.

†24: Colombia (Cucuta 1, "Colombia" 5); Venezuela (Encontrados 2, Orope 1, Rio Aurare 1, Colon, Tachira 4); Panama (Colon) 9; Costa Rica (Lagarto) 1.

Centurus seductus (*Bangs*). SAN MIGUEL WOODPECKER.

Melanerpes seductus BANGS, Auk, 1901, p. 26 (San Miguel Island, Bay of Panama); THAYER and BANGS, Bull. Mus. Comp. Zool., XLVI, 1905, p. 150.
Centurus seductus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 75.

Range: San Miguel Island, Bay of Panama.

***Centurus hoffmannii** *Cabanis*. HOFFMANN'S WOODPECKER.

Centurus hoffmannii CABANIS, Journ. für Ornith., X, 1862, p. 322 (Costa Rica).
Centurus hoffmani CHERRIE, Auk, 1892, p. 327 (Costa Rica; both coasts); FERRY Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 267 (Guayabo, Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, 1914, p. 76.
Melanerpes hoffmanni HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 181 (San José; Punta Arenas).

Range: Costa Rica and Nicaragua.

15: Costa Rica (San José 2, Guayabo 5, Orosi 1, Miravalles 1, Limon 2); Nicaragua (San Gerónimo) 4.

Centurus polygrammus polygrammus *Cabanis*. OAXACA WOODPECKER.

Centurus polygrammus CABANIS, Journ. für Ornith., 1862, p. 326 (San Bartalomé, Tehuántepec, Oaxaca, Mexico).
Centurus aurifrons santa-cruzi RIDGWAY, Proc. U. S. Nat. Mus., IV, 1881, p. 106, part (Oaxaca).
[*Melanerpes aurifrons*] Subsp. *A*, *Melanerpes santacruzi* HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 179, part (Tonalá, Chiapas).
Centurus polygrammus polygrammus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 78.

Range: Southern Mexico (Oaxaca and western Chiapas).

Centurus polygrammus frontalis (*Nelson*). CHIAPAS WOODPECKER.

Melanerpes frontalis NELSON, Auk, 1900, p. 257 (San Vicente, Chiapas).
Centurus polygrammus frontalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 80.

Range: Southern Mexico (central and eastern Chiapas).

***Centurus aurifrons** (*Wagler*). GOLDEN-FRONTED WOODPECKER.

Picus aurifrons WAGLER, Isis, 1829, p. 512 (Mexico, i. e., Ismiquilpám, Hidalgo, Mexico).[a]
Centurus aurifrons BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 557, pl. 52, figs. 3, 6; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 81.

[a] See Salvin and Godman, Biol. Centr.-Am., Aves, II, 1895, p. 418.

Melanerpes aurifrons HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 177.

Range: Northern and central Mexico in states of Tamaulipas; Nuevo Leon; Coahuila; eastern Chihuahua; Aguas Calientes; Guanajuato; San Luis Potosi; Hidalgo; Mexico; Durango; Jalisco, and Michoacan and northward through the greater part of Texas.

†16: Texas (Laredo 2, Corpus Christi 6, "Texas" 2); Mexico (San Luis Potosi 2, Sabinas, Coahuila 4).

***Centurus santacruzi santacruzi** *Bonaparte*. VALESQUEZ'S WOODPECKER.

Centurus santacruzi BONAPARTE, Proc. Zool. Soc. Lond., 1837, p. 116 (Guatemala).
Melanerpes santacruzi fumosus NELSON, Auk, 1900, p. 258 (Huehuetan, Chiapas).
Centurus santacruzi santacruzi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 84.

Range: Southeastern Mexico (in state of Chiapas), Guatemala, Salvador and northern Nicaragua.

†10: Guatemala (San José, Esquintla 1, Zacapa, 4, Lake Amatilán 3, Patulul 1, Los Amates 1).

***Centurus santacruzi grateloupensis** (*Lesson*). LESSON'S WOODPECKER.

Picus grateloupensis LESSON, Rev. Zool., 1839, p. 41 (Mexico).
Centurus santacruzi grateloupensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 87.

Range: Eastern Mexico in states of Tamaulipas, Vera Cruz, Puebla and Oaxaca.

†10: Mexico (Tampico 2, Tamaulipas 8).

***Centurus santacruzi pauper** *Ridgway*. TRUXILLO WOODPECKER.

Centurus santacruzi pauper RIDGWAY, Proc. U. S. Nat. Mus., X, 1888, p. 582 (Truxillo, Honduras); DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 93, part (Belize, Brit. Honduras); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 88.

Range: British Honduras and northern Honduras.

2: British Honduras.

***Centurus chrysogenys chrysogenys** (*Vigors*). GOLDEN-CHEEKED WOODPECKER.

Picus chrysogenys VIGORS, Zool. Beechey's Voy., 1839, p. 24 (no locality given, but probably Mazatlan or Tepic).[a]
Melanerpes elegans HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 184, part (Sonora; Mazatlan; San Bas, Tepic).

[a] See Ridgway, *l. c.*, p. 90, footnote.

Centurus chrysogenys chrysogenys RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 89.

Range: Western Mexico in states of Sinaloa, Sonora and Tepic.

1: ? "Mexico."

***Centurus chrysogenys flavinuchus** *Ridgway.* ACAPULCO WOODPECKER.

Centurus chrysogenys flavinuchus RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 32 (Acapulco, Guerrero, Mexico); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 91.

Picus elegans (not of Müller, 1776) SWAINSON, Philos. Mag., N. S., I, No. 6, 1827, p. 439 ("Maritime land").

Zebrapicus elegans MALHERBE, Mon. Picidæ, II, 1862, p. 225, IV, 1862, pl. 102, fig. 5.

Melanerpes elegans HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 184, part.

Range: South-central and southwestern Mexico in states of Puebla, Morelos, Jalisco, Michoacán, Colima, Guerrero and western Oaxaca.

†17: Mexico (Guerrero 15, Colima 1, Jalisco 1).

Centurus hypopolius (*Wagler*). GRAY-BREASTED WOODPECKER.

Picus hypopolius WAGLER, Isis, 1829, p. 514 ("Mexico" = Puebla)[a].

Zebrapicus hypopolius MALHERBE, Mon. Picidæ, II, 1862, p. 228; IV, 1862, pl. 103, figs. 4-5.

Melanerpes hypopolius HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 186.

Centurus hypopolius RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 92.

Range: Southern Mexico, in states of Puebla, Morelos, Mexico, Guerrero and Oaxaca.

***Centurus uropygialis uropygialis** *Baird.* GILA WOODPECKER.

Centurus uropygialis BAIRD, Proc. Acad. Nat. Sci. Phila., 1854, p. 120 (Bill. Williams R., Arizona, U. S. A.).

Melanerpes uropygialis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 182.

Zebrapicus kaupii MALHERBE, Mon. Picidæ, II, 1862, p. 245 ("Bolivia"); IV, 1862, pl. 106, figs. 4-5.

Centurus sulfuriventer REICHENBACH, Handb. Scans. Picinæ, 1854, p. 410, pl. 664, figs. 4411-4412 (Mexico).

Centurus uropygialis uropygialis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 93.

Range: Southwestern United States, in southeastern Nevada, southwestern New Mexico, northern Lower California, southeastern California and Arizona; and in Mexico, in states of Sonora, Chihuahua, Durango, Zacatecas, Sinaloa, Tepic, Aguas Calientes and Jalisco.

†17: Arizona (Phœnix 5, Calabasas 8, Big Sandy Creek 1); Mexico (Jalisco 1, Sonora 2).

[a] See Cabanis, Journ. für Ornith, 1862, p. 329.

Centurus uropygialis brewsteri *Ridgway*. BREWSTER'S WOODPECKER.

Centurus uropygialis brewsteri RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p, 32 (Santiago, southern Lower California); *Id.*, Bull. U. S. Nat. Mus., No. 50. VI, 1914, p. 96.

Range: Southern Lower California (from Cape San Lucas northward to San Ignácio).

***Centurus radiolatus** (*Wagler*). JAMAICAN WOODPECKER.

Picus radiolatus WAGLER, Syst. Av., 1827, Picus sp. 99 (Jamaica); *Id.*, Isis, 1829, p. 512.

Centurus radiolatus GOSSE, Bds. Jamaica, 1847, p. 271; CORY, Auk, 1886, p. 378; *Id.*, Bds. West Indies, 1889, p. 173; SCOTT, Auk, 1892, p. 275; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 97.

Zebrapicus radiolatus MALHERBE, Mon. Picidæ, II, 1862, p. 237; IV, 1862, pl. 104, figs. 5-6.

Melanerpes radiolatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 166; CORY, Cat. West Ind. Bds., 1892, pp. 12, 104, 130.

Range: Island of Jamaica, Greater Antilles.

†12: Jamaica.

Genus **CHRYSERPES** Miller.

Chryserpes Miller, Bull. Am. Mus. Nat. Hist., 1915, p. 516 (Type *Picus striatus* Müller).

***Chryserpes striatus** (*Müller*). HAITIAN WOODPECKER.

Picus striatus MÜLLER, Vollst. Natursyst. Suppl., 1776, p. 91 (Santo Domingo).

Zebrapicus striatus MALHERBE, Mon. Picidæ, II, 1862, p. 231; IV, 1862, pl. 107, figs. 3-4.

Centurus striatus SALLÉ, Proc. Zool. Soc. Lond., 1857, p. 234; CORY, Bull. Nutt. Orn. Club, VI, 1881, p. 154 (Mts. of Haiti); *Id.*, Bds. Haiti and San Domingo, 1884, p. 111, pl. 23, figs. 1-2; *Id.*, Auk, 1886, p. 378; *Id.*, Bds. West Indies, 1889, p. 173; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 98.

Chloronerpes striatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 89; CORY, Cat. West Ind. Bds., 1892, pp. 12, 104, 131; CHERRIE, Contr. Orn. San Domingo, 1896, p. 21.

Range: Haiti and San Domingo, Island of Haiti.

†98: Haiti (Jacmel 4, Le Coupe 8); San Domingo (Aquate 30, San Domingo City 13, Fuerte Resoli 2, Honduras 18, Maniel 1, Catare 10, Puerto Plata 12).

Genus **BALANOSPHYRA** Ridgway.

Balanosphyra Ridgway, Proc. Biol. Soc. Wash., XXIV, 1911, p. 34 (Type *Picus formicivorus* Swainson).

***Balanosphyra formicivora formicivora** (*Swainson*). ANT-EATING WOODPECKER.

Picus formicivorus SWAINSON, Philos. Mag., I, 1827, p. 439 (Temiscaltepec, Mexico).

Picus melanopogon TEMMINCK, Planches Col., IV, 1828, pl. 451, and text (Mexico).

Melampicus formicivorus MALHERBE, Mon. Picidæ, II, 1862, p. 199: IV, 1862 pl. 99, figs. 1, 2, 3.

Melanerpes formicivorus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 149, part; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 412, part; LACY, Auk, 1911, p. 209 (Kerrville, Texas); and authors.

Balanosphyra formicivora formicivora RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 102.

Range: South-central Texas, southward through Mexico (Nuevo León and Tamaulipas, and from Zacatecas and southern Sinaloa, southward to Oaxaca and Chiapas) to Guatemala.

8: Mexico (Tamaulipas) 2; Guatemala (Tecpam) 6.

***Balanosphyra formicivora aculeata** (*Mearns*). MEARN'S ANT-EATING WOODPECKER.

Melanerpes formicivorus aculeatus MEARNS, Auk, 1890, p. 249 (Squaw Park, central Arizona).

Balanosphyra formicivora aculeata RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 105.

Range: Arizona, New Mexico and western Texas (Davis Mts.) and southward in Mexico in Sonora and Chihuahua to Durango.

†28: Mexico (Durango 4, Chihuahua 8, Bostillos 2, Sonora 2); Arizona (Santa Rita Mts., 2), Huachuca Mts., 8, "Arizona," mounted, 2).

***Balanosphyra formicivora bairdi** (*Ridgway*). CALIFORNIA WOODPECKER.

Melanerpes formicivorus bairdi RIDGWAY, Bull. U. S. Nat. Mus., No. 21, 1881, p. 34 (Petaluma, Sonoma Co., California).

Subsp. a. *Melanerpes melanopogon* HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 151, part (California).

Balanosphyra formicivora bairdi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 107.

Range: Pacific coast district of United States, from northern Lower California (Santo Tomas, Tecate Valley, San Pedro Martir Mts., etc.), northward to northwestern Oregon; accidental to south-central Oregon (Fort Klamath).

11: California (Gilroy 2, Alhambra 1, Clipper Gap 3, Pasadena 1, Palo Alto 2, "California" 2).

***Balanosphyra formicivora angustifrons** (*Baird*). NARROW-FRONTED WOODPECKER.

Melanerpes formicivorus var. *angustifrons* BAIRD, in Cooper's Orn. Cal., I, 1870, p. 405 (Cape San Lucas, Lower California).

Melanerpes formicivorus angustifrons BENDIRE, Life Hist. N. Am. Bds., II, 1895, p. 117; and of authors.

Melanerpes angustifrons BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, pl. 53, figs. 1-2.

Balanosphyra formicivora angustifrons RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 108.

Range: Southern Lower California (Cape San Lucas district).

4: Southern Lower California.

***Balanosphyra formicivora albeola** (*Todd*). BELIZE WOODPECKER.

Melanerpes formicivorus albeolus TODD, Proc. Biol. Soc. Wash., XXIII, 1910, p. 153 (near Manatee, British Honduras).

Balanosphyra formicivora albeola RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 109.

Range: British Honduras (region of Manatee Lagoon; Belize).

1: British Honduras (Belize River).

***Balanosphyra formicivora striatipectus** (*Ridgway*). STREAKED-CHESTED WOODPECKER.

Melanerpes formicivorus var. *striatipectus* RIDGWAY, in Baird, Brewer and Ridgway's Hist. N. Am. Bds. II, 1874, p. 561 (Borris, Costa Rica)[a]; *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 110.

Range: Southern and southeastern Honduras, Nicaragua and Costa Rica to western Panama (Chiriqui, etc.).

3: Nicaragua (San Raphaél del Norte 2, Matagalpa 1).

***Balanosphyra flavigula** (*Malherbe*). SCLATER'S YELLOW-THROATED WOODPECKER.

Melampicos flavigula MALHERBE, Rev. et Mag. de Zool., 1849, p. 542 (Colombia).

Melampicus flavigula MALHERBE, Mon. Picidæ, II, 1862, p. 202; IV, 1862, pl. 99, figs. 5-6.

Melanerpes flavigula SCLATER, Proc. Zool. Soc. Lond., 1855, p. 161; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 154; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 350 (eastern and central and western Andes, Colombia; numerous localities).

Melanerpes flavigularis SCLATER, Proc. Zool. Soc. Lond., 1856, p. 307.

Balanosphyra flavigula RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 102, in key.

Range: Interior of Colombia.

3: "Colombia."

Balanosphyra xantholarynx (*Reichenbach*). YELLOW-THROATED WOODPECKER.

[a] *Cf.* Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 111.

Melanerpes xantholarynx REICHENBACH, Handb. Scans. Picinæ, 1854, p. 384, pl. 643, figs. 4293-4294 ("Mexico"); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 155 (Mexico?).

Range: Mexico.[a]

Genus **LINNEOPICUS** Malherbe.

Linneopicus Malherbe, "Mem. Acad. Metz., 1848-49"; Nouv. Classif. Picin., 1850, p. 52 (Type *Picus herminieri* Lesson).

*Linneopicus herminieri (*Lesson*). GUADELOUPE WOODPECKER.

Picus herminieri LESSON, Traité d'Orn., 1831, p. 228 (Guadeloupe I., Lesser Antilles).

Melampicus herminieri MALHERBE, Mon. Picidæ, II, 1862, p. 198; IV, 1862, pl. 100, fig. 1.

Melanerpes herminieri HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 163; CORY, Cat. West Ind. Bds., 1892, p. 12.

Melanerpes l'herminieri LAWRENCE, Proc. U. S. Nat. Mus., I, 1878, p. 459; CORY. Auk, 1886, p. 377; *Id.*, Bds. West Indies, 1889, p. 172.

Linneopicus herminieri RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 113,

Range: Island of Guadeloupe, Lesser Antilles.

†36: Guadeloupe I., Lesser Antilles.

Genus **ASYNDESMUS** Coues.

Asyndesmus Coues, Proc. Acad. Nat. Sci. Phila., 1866, p. 55 (Type, by original designation, *Picus torquatus* Wilson = *Asyndesmus lewisi* Riley.

*Asyndesmus lewisi *Riley*. LEWIS' WOODPECKER.

Picus torquatus (not of Boddaert, 1783) WILSON, Am. Orn., III, 1811, p. 31, pl. 20 (Montana, about lat. 46° N.).

Asyndesmus lewisi RILEY, Proc. Biol. Soc., Wash., XVIII, 1905, p. 225, in text (ex "*Picus lewis* Drap[iez]" Gray, Gen. Bds., III, 1849, App., p. 22; new name for *Picus torquatus* WILSON, preoccupied); Amer. Orn. Union Check List, 3rd ed., 1910, p. 193; Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 114.

Asyndesmus torquatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 137; and authors.

Melanerpes torquatus JARDINE, ed. Wilson's Am. Orn., I, 1832, p. 321, pl. 20, fig. 3; and authors.

Range: Western North America, British Colombia and southern Alberta, south to Arizona and New Mexico and from the inner coast ranges of California to the Black Hills, South Dakota, and western Nebraska, western Kansas, eastern Colorado, etc.; casual in eastern

[a] Type locality doubtful. The type specimen (which so far as known is unique) has apparently been lost.

Kansas, Oklahoma and Vancouver Island, and in winter to southern California and Chihuahua, Mexico.

†12: South Dakota 2, Colorado 1, California (San Francisco 1, Redding 1, "California" 3); Arizona (Ft. Whipple) 1; Washington (Prescott) 3.

Genus **TRIPSURUS** Swainson.

Tripsurus Swainson, Classif. Bds., II, 1837, p. 311 (Type, as fixed by Gray, 1840, *Picus flavifrons* Vieillot).

*Tripsurus cruentatus (*Boddaert*). LITTLE BLACK WOODPECKER.

Picus cruentatus BODDAERT, Tabl. Pl. Enl., 1783, p. 43 (Cayenne).

(?) *Picus hirundinaceus* LINNÆUS, Syst. Nat., I, 1766, p. 174 ("America Septentrionali").

Picus hirundinaceus GMELIN, Syst. Nat., I, 1788, p. 426.

Melanerpes meropirostris BONAPARTE, Proc. Zool. Soc. Lond., 1837, p. 120.

Melampicus hirundinaceus MALHERBE, Mon. Picidæ, II, 1862, p. 192; IV, 1862, pl. XCVIII, figs. 4, 5, 6.

Melanerpes cruentatus TACZANOWSKI, Orn. Pérou, III, 1886, p. 89; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 155 (Bogotá, Colombia; Sarayacu, Ecuador; Chyavetas, eastern Peru; Ucayali R., Simacu, Bolivia; Chapada, Matto Grosso, Rio Negro, Pernambuco, Brazil); Goeldi, Alb. Aves Amazon, 1900, pt. 1, pl. 18, fig. 8; GOODFELLOW, Ibis, 1902, p. 209 (Upper Rio Napo, Ecuador); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 92 (Suapure, Orinoco Region, Venezuela); HELLMAYR, Nov. Zool., XIV, 1907, p. 25 (Itaituba and Pará); *Id.*, p. 79 (Teffe); *Id.*, p. 397 (Humaytha, Rio Madeira); BERLEPSCH, Nov. Zool., XV, 1908, p. 271 (Cayenne); HELLMAYR, Nov. Zool., XVII, 1910, p. 383 (Alianca, Rio Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 247 (Pará; Rio Caura; Rio Tapajoz; Goyana; Rio Purús; Rio Acre, etc., Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 485; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 350 (Florencia; La Morelia; Buena Vista; Villavicencio, Colombia); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 56 (Javaweg, Surinam).

Tripsurus cruentatus CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 306 (Munduapo).

Range: Guianas, Venezuela, Colombia, Ecuador, Peru, Bolivia and Brazil.

†13: Peru (Moyobamba 1, Yurimaguas 2, Lower Huallaga 3); "Colombia" 2; "Venezuela" 1; Brazil (Porto Velho, Upper Rio Madeira) 3; Bolivia (Todos Santos, Rio Chapare) 1.

*Tripsurus rubrifrons (*Spix*). RED-FRONTED WOODPECKER.

Picus rubrifrons SPIX, Av. Bras., I, 1824, p. 61, pl. LV, figs. 1-2 ("in sylvis Paræ").

Melampicus rubrifrons MALHERBE, Mon. Picidæ, II, 1862, p. 196; IV, 1862, pl. XCVIII, figs. 1-2.

Melanerpes melanocephalus PELZELN, Orn. Bras., 1870, p. 247 (Barra do Rio Negro).

Melampicus melanocephalus MALHERBE, Mon. Picidæ, II, 1862, p. 195 (= ♀, Rio Negro).

Melanerpes rubrifrons HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 157 (Barra, Rio Negro; Pará; Cayenne; Guiana); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 608 (Spix's Types); BERLEPSCH, Nov. Zool., XV, 1908, p. 271 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 247 (Pará; Benevideo; Peixe-Boi, northeastern Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 486; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 306, crit. (Caura R., Venezuela).

Tripsurus rubrifrons BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 57 (Javaweg, Surinam).

(?) *Melanerpes hargitti* DUBOIS, Synop. Av., I, 1899, p. 68, pl. 2, fig. 2.[a]

Range: Guianas, eastern Venezuela, north and northeastern Brazil.

7: British Guiana (Potaro 2, Demerara R., 2, "British Guiana" 1); "Venezuela" 2.

***Tripsurus pucherani pucherani** (*Malherbe*). PUCHERAN'S WOODPECKER.

Zebrapicus pucherani MALHERBE, Rev. et Mag. de Zool., I, 1849, p. 542 ("Tobago" *errore* = Colombia)[b]; *Id.*, Mon. Picidæ, II, 1862, p. 227, part (Santa Marta, Colombia; "Tobago"); *Id.*, IV, 1862, pl. 103, figs. 1-2.

Centurus pucheranii FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 276 (Guayabo and Limon, Costa Rica).

Melanerpes pucherani HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 164, part (from Nicaragua, southward); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1188 (Novita, western Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 351 (western Colombia).

Tripsurus pucherani pucherani RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 119.

Range: Southern Honduras, southward to Colombia and western and central Ecuador.

†30: Costa Rica (Guayabo 6, Limon 18, Siquirres 2, Orosí 3); Panama (Veragua) 1; Colombia (El Tigre, Rio Samana) 1.

Tripsurus pucherani perileucus (*Todd*). WHITE-BARRED WOODPECKER.

Melanerpes pucherani perileucus TODD, Proc. Biol. Soc. Wash., XXIII, 1910, p. 153 (near Manatee, British Honduras).

Tripsurus pucherani perileucus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 122.

Range: Southeastern Mexico (Vera Cruz, Puebla, Orizaba, etc.), southward through Guatemala to British Honduras and northern Honduras.

[a] *Melanerpes hargitti* DUBOIS (Type loc. unknown): Similar to *cruentatus*, but lacks the whitish superciliary stripe (see *Melanerpes* sp. inc., Dubois, Proc. Zool. Soc. Lond., 1897, p. 783).

[b] Designated by Hellmayr, *l. c.*, 1911, p. 1188.

***Tripsurus chrysauchen** (*Salvin*). GOLDEN-NAPED WOODPECKER.

Melanerpes chrysauchen SALVIN, Proc. Zool. Soc. Lond., 1870, p. 213 (Bugaba, Chiriqui, Panama); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 160 (Bugaba, Chiriqui); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 414, pl. 60.

Tripsurus chrysauchen RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 123.

Range: Western Panama and southwestern Costa Rica.

3: Costa Rica (Pozo Azúl 1, Lagarto 2).

Tripsurus pulcher (*Sclater*). BEAUTIFUL WOODPECKER.

Melanerpes pulcher SCLATER, Proc. Zool. Soc. Lond., 1870, p. 330 (Bogotá); WYATT, Ibis, 1871, p. 129; BERLEPSCH, Ibis, 1880, p. 114; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 160, pl. III; GOODFELLOW, Ibis, 1902, p. 210 (Santo Domingo; Ecuador).

Range: Colombia and Ecuador.

***Tripsurus flavifrons** (*Vieillot*). YELLOW-FRONTED WOODPECKER.

Picus flavifrons VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 75 ("Bresil"); SPIX, Av. Bras., I, 1824, p. 60, pl. LII, figs. 1-2.

Picus coronatus LICHENSTEIN, Verz. Doubl., 1823, p. 10.

Picus rufiventris DRAPER, Dict. Class, XIII, 1828, p. 507.

Melampicus flavifrons MALHERBE, Mon. Picidæ, II, 1862, p. 207; IV, 1862, pl. 100, figs. 2, 3, 4.

Melanerpes flavifrons PELZELN, Orn. Bras., 1870, p. 248; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 161 (Minas Geraes; Goyaz; Novo Fribourgo, southeastern Brazil; São Paulo; Rio Grande do Sol); HELLMAYR, Nov. Zool., XV, 1908, p. 80 (Goyaz); CHUBB, Ibis, 1910, p. 280 (Sapucay, Paraguay).

Range: Southern Brazil and Paraguay.

1: "Brazil."

Genus **LEUCONERPES** Swainson.

Leuconerpes Swainson, Classif. Bds., II, 1837, p. 310 (Type *Picus candidus* Otto).

Colombpicus Malherbe, Nouv. Classif. Picin., 1850, p. 45 (Type *Picus dominicanus* Vieillot, = *P. candidus* Otto).

***Leuconerpes candidus** (*Otto*). WHITE-BELLIED WOODPECKER.

Picus candidus OTTO, Naturg. Vögel Buffon, XXIII, 1796, p. 191 (Cayenne); *Id.* (?), in Buffon's Naturg. Uebers., XII, 1772, p. 251, pl. XXIII[a].

Picus dominicanus VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 72; SPIX, Av. Bras., I, 1824, p. 59, pl. 1, figs. 1-2.

Picus melanopterus NEUWIED, Reis. Bras., I, 1820, p. 165.

Melampicus dominicanus MALHERBE, Mon. Picidæ, II, 1862, p. 217; IV, 1862, pl. 101, figs. 1-2.

[a] I have not been able to verify this reference. It is given by Hargitt (*l. c.*), Sclater and others, but ignored by Brabourne and Chubb.

Melanerpes candidus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 148 (Bahia); Minas Geraes; Chapada, Matto Grosso; Bolivia; Salta, Argentina); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 227 (Tucuman, Tapia, etc., Argentina); KERR, Ibis, 1901, p. 228 (Gran Chaco); CHUBB, Ibis, 1910, p. 279 (Ibytemi; Sapucay, Paraguay); GRANT, Ibis, 1911, p. 322 (Paraguay).

Leuconerpes candidus SCLATER and HUDSON, Argentine Orn., II, 1889, p. 23; PELZELN, Orn. Bras., 1870, p. 247; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 604 (Spix's Types); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 247 (Marajo; Mexiana; Monte Alegre; Rio Macruro; Maranhão, Brazil).

Range: Eastern and southern Brazil; Bolivia; Paraguay; Uruguay and northern Argentina.

6: Brazil (Itacoatiara, Amazon River 2; Sao Marcello, Rio Preto 1; "Brazil" 1); "Argentina" 2.

Genus **CHLORONERPES** Swainson.

Chloronerpes Swainson, Classif. Bds., II, 1837, p. 307 (Type *Picus rubiginosus*, Swainson).

Chloronerpes chrysochloros chrysochloros (*Vieillot*). GOLDEN-GREEN WOODPECKER.

Picus chrysochloros VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 98 (Paraguay).

Picus microcephalus SPIX, Av. Bras., I, 1824, p. 60, pl. 53, fig. 2.

Chloropicus chrysochlorus MALHERBE, Mon. Picidæ, II, 1862, p. 141, pl. 84, figs. 1-2.

Chrysopicus brasiliensis BONAPARTE, Consp. Volucr. Zygod., 1854, No. 152, p. 9.

Chroronerpes chrysochlorus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 72; HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 228 (Rio Bermejo, Salta, Argentina); GRANT, Ibis, 1911, p. 320 (Tayru, Paraguay).

Chloronerpes chrysochloros chrysochloros HELLMAYR, Nov. Zool., XVII, 1910. p. 382 in text (Paraguay; Rio Pilcomayo, Oran, etc., Argentina; San Fran, cisco, Chaco and Piedra Blanca, Bolivia; western Matto Grosso Corumbá, Miranda and Cuyabá, Brazil); *Id.*, Abh. K. Bayer. Akad-Wiss.,, XXII, 1906, p. 605 (Matto Grosso, Cuyabá, Corumbá, Brazil and east Bolivia and Paraguay).

Range: Paraguay, Bolivia, central and southwestern Brazil and northern Argentina.

Chloronerpes chrysochloros brasiliensis (*Swainson*).[a] BRAZILIAN GREEN WOODPECKER.

Picus brasiliensis SWAINSON, Zool. Illust., 1821, pl. XX (Bahia).

Chloropicus polyzonus MALHERBE, Mon. Picidæ, II, 1862, p. 136, pl. 83, figs. 1-2.

Chloronerpes polyzonus GRAY, Gen. Bds., II, 1846, p. 443, pl. 110, fig. 4.

[a] *Chloronerpes chrysochloros brasiliensis* (SWAINSON): Like *C. c. chrysochloros*, but bill larger and longer and upper parts less olive.

Chloronerpes brasiliensis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 73.
Chloronerpes chrysochloros braziliensis HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 605 (Bahia and Piauhy); *Id.*, Nov. Zool., XVII, 1910, p. 382 (Bahia; Piauhy); IHERING, Aves do Brazil, I, 1907, p. 179 (Piauhy; Bahia; Esp. Santo and Rio de Janeiro).

Range: Eastern Brazil (Bahia, Piauhy, etc.).

***Chloronerpes chrysochloros paraensis** *Snethlage.*[a] SNETHLAGE'S GREEN WOODPECKER.

Chloronerpes paraensis SNETHLAGE, Orn. Monatsber., XV, 1907, p. 163 (Murucutú, near Pará); *Id.*, Bol. Mus. Goeldi, VIII, 1914, p. 245 (Maranhão, Pará).
Chloronerpes chrysochloros paraensis HELLMAYR, Nov. Zool., XVII, 1910, p. 381 (Murucutú, Pará and Calama, right bank of the lower Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Northern Brazil in Amazon Region, from Lower Rio Madeira to Pará.

1: Brazil (Jua, near Iguatu, Ceará).

Chloronerpes chrysochloros capistriatus (*Malherbe*).[b] BONAPARTE'S GREEN WOODPECKER.

Chloropicus capistriatus MALHERBE, Mon. Picidæ, II, 1862, p. 140, pl. 83 ("Bresil" = Rio Negro).
Craugasus capistriatus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 160.
Chloronerpes capistriatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 74 (Sarayacu, Ecudaor; Barra, Rio Negro, Brazil, and Rupununi R., British Guiana); HELLMAYR, Nov. Zool. XIV, 1907, p. 79 (Teffé, Rio Solimoes, Brazil); CHUBB, Bds. British Guiana, I, 1916, p. 482.
[*Chloronerpes*] *chrysochloros capistriatus* HELLMAYR, Nov. Zool., XVII, 1910, p. 382 Manaos, S. Isabel, Marabitanas, Rio Vaupe, Rio Negro, Teffé, Rio Solimoes, Brazil; Sarayacu, eastern Ecuador; Rio Rupununi, British Guiana).

Range: Northwestern Brazil from the Rio Negro (Bara, etc.) west into Ecuador and north to British Guiana.

Chloronerpes chrysochloros aurosus *Nelson.* GOLDMAN'S WOODPECKER

Chloronerpes chrysochlorus aurosus NELSON, Smiths. Misc. Coll., LX, No. 3, 1912, p. 3 (Marraganti, 150 miles east of Canal Zone, eastern Panama); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 135.

Range: Eastern Panama.

[a] *Chloronerpes chrysochloros paraensis* SNETHLAGE: Larger than *brasiliensis* and back more golden olive; ground color of under parts pale yellow; pileum red (in male), but mystacal stripe deep olive. Wing, 137; tail, 73; bill, 26 mm.

[b] *Chloronerpes chrysochloros capistriatus* (MALHERBE): Entire under parts regularly barred with yellowish white and deep olive; pileum (in male) and mystacal stripe crimson; female with upper part of head bright golden olive.

***Chloronerpes xanthochlorus** *Sclater and Salvin.* GREEN AND YELLOW WOODPECKER.

Chloronerpes xanthochlorus SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1875, p. 237 (San Cristobal, Tachira, Venezuela); *Id.*, 1879, p. 533 (Remedios, Antioquia, Colombia); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 73, pl. 1; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 347 (Remolino, lower Magdalena River, Colombia).

Range: Northwestern Venezuela and northern Colombia.

3: Venezuela (Catatumbo 1; Orope, Zulia 1; Rio Aurare 1).

Chloronerpes erythropsis (*Vieillot*). RED-FACED GREEN WOODPECKER.

Picus erythropsis VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 98 ("Bresil").

Picus icterocephalus (*nec* Latham) SPIX, Av. Bras., 1824, I, p. 62, pl. 54, fig. 1 (female).

Chloronerpes erythrops GRAY, Gen. Bds., II, 1846, p. 443.

Chloropicus erythropsis MALHERBE, Mon. Picidae, II, 1862, p. 143, pl. 87, figs. 1-2.

Chloronerpes erythropes PELZELN, Orn. Bras., 1870, p. 244.

Chloronerpes erythropsis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 75 (Pernambuco; Bahia; Rio Janeiro); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 608 (Spix's Types).

Range: Northeastern, eastern and southeastern Brazil.

Chloronerpes leucolæmus (*Malherbe*). WHITE-THROATED GREEN WOODPECKER.

Picus leucolæmus MALHERBE, Mem. Soc. Roy. Liége, 1845, p. 68 ("Bresil").

Chloropicus isidori MALHERBE, Rev. et Mag. de Zool., 1850, p. 154.

Chloropicus leucolæmus MALHERBE, Mon. Picidæ, II, 1862, p. 145, pl. 85, figs.3-4.

Chloronerpes leucolæmus TACZANOWSKI, Orn. Pérou, III, 1886, p. 85; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 76 (Bogotá;[a] Sarayacu, Ecuador; Engenho-do-Gama, Brazil).

Range: Matto Grosso, Brazil, to eastern Ecuador; Colombia?

Chloronerpes litæ *Rothschild.*[b] ROTHSCHILD'S GREEN WOODPECKER.

Chloronerpes litæ ROTHSCHILD, Bull. Brit. Orn. Club, XI, 1901, p. 70 (Lita, alt. 3000 ft., N. Ecuador); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 347, crit. (Baudo Mts., Colombia).

Range: Northern Ecuador and southern Colombia.

[a] A purchased specimen which may not have come from Bogotá.

[b] *Chloronerpes litæ* ROTHSCHILD: Approaches *C. leucolæmus*, but differs in having the bases of the primaries uniform chestnut, this color increasing in extent on outer webs from first to last primary and extending over the whole outer webs on all except the innermost ones (not widely edged with green as in *C. leucolæmus*); red of crown and moustache much darker; upper surface darker greenish olive; the central cream-colored marking on chest more streak-like than rounded.

***Chloronerpes flavigula** (*Boddaert*). YELLOW-THROATED GREEN WOODPECKER.

Picus flavigula BODDAERT, Tabl. Pl. Enl., 1783, p. 49 (Cayenne).
Picus chlorocephalus GMELIN, Syst. Nat., I, 1788, p. 432.
Picus icterocephalus LATHAM, Index Orn., I, 1790, p. 241; SPIX, Av. Bras., 1824, p. 62, pl. 54, fig. 2 (female).
Chloronerpes flavigularis TACZANOWSKI, Orn. Pérou, III, 1886, p. 84.
Chloronerpes flavigula GRAY, Gen. Bds., III, 1849, p. 22; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 77; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 91 (Nericagua and Munduapo, Orinoco R., Venezuela); HELLMAYR, Nov. Zool., XII, 1905, p. 301 (Pará); *Id.*, XIII, 1906, p. 379 (Prata Dist., Pará); *Id.*, XIV, 1907, p. 25 (Itaituba, Santarem, Brazil); *Id.*, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 608 (Spix's Types); *Id.*, XVII, 1910, p. 381 (Calama and Maruins, Rio Madeira, Brazil); BERLEPSCH, Nov. Zool., XV, 1908, p. 270 (Iponsin, Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 245 (Pará; Rio Gauma; Rio Capim; Rio Tocantins; Rio Xingu; Rio Tapajoz; Rio Jury; Rio Jamunda); CHUBB, Bds. Brit. Guiana, I, 1916, p. 482; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 305 (beyond fall of Atures, Orinoco, near Mt. Duida, Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 56(Paramaribo, Lelydorp and Javaweg, Surinam).

Range: The Guianas, Venezuela, northern Brazil, eastern Ecuador and Peru.

3: British Guiana (Demerara R.) 1; Brazil (base of Serra da Lua, near Boa Vista 1; Conceicão, Rio Branco 1).

Chloronerpes aurulentus (*Temminck*). GOLD-BACKED GREEN WOODPECKER.

Picus aurulentus TEMMINCK, Pl. Cl., IV, 10th livr., 1823, pl. 59, fig. 1 (Paraguay).
Picus xanthotœnia WAGLER, Syst. Av., 1827, Picus sp. 51.
Chloropicus aurulentus MALHERBE, Mon. Picidæ, II, 1862, p. 137, pl. 84, figs. 4-5.
Chloronerpes aurulentus GRAY, Gen. Bds., II, 1846, p. 443; PELZELN, Orn. Bras., 1870, p. 243; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 79; DABBENE, Anal. Mus. Nac. Buenos Aires, XVIII, 1910, p. 275 (Misiones; Formosa, Chaco, northern Argentina); CHUBB, Ibis, 1910, p. 278 (Sapucay, Paraguay).

Range: Southern Brazil, Paraguay and northern Argentina.

Chloronerpes callopterus *Lawrence*. PANAMA WOODPECKER.

Chloronerpes callopterus LAWRENCE, Ann. Lyc. Nat. Hist., N. Y., VII, 1862,p. 476 (Lion Hill, Panama); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 8 (Verágua); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 409, pl. 59, fig. 1 (Verágua); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 135.

Range: Panama (Verágua; Cerro Brujo; Cana, etc.).

***Chloronerpes simplex simplex** *Salvin*. BUGABA WOODPECKER.

Chloronerpes simplex SALVIN, Proc. Zool. Soc. Lond., 1870, p. 212 (Bugaba, Chiriquí, western Panama); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890,

p. 81; CHERRIE, Proc. U. S. Nat. Mus., XIV, 1891, p. 536 (Costa Rica); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 410 (La Libertad, etc., Nicaragua); FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 267 (Guayabo, Costa Rica).

Chloronerpes simplex simplex CARRIKER, Ann. Carnegie, Mus., VI, 1910, p. 584, crit. (Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 136.

Range: Western Panama and Costa Rica to Nicaragua.

1: Costa Rica (Guayabo).

Chloronerpes simplex allophyeus *Bangs.* YARUCA WOODPECKER.

Chloronerpes simplex allophyeus BANGS, Bull. Mus. Comp. Zool., XXXIX, 1903, p. 145 (Yuruca, Honduras, alt. 1000 ft.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 138.

Range: Northern Honduras.

***Chloronerpes æruginosus** (*Malherbe*). LICHTENSTEIN'S WOODPECKER.

Chrysopicus æruginosus MALHERBE, Mon. Picidae, II, 1862, p. 171 (Mexico); *Id.*, IV, 1862, pl. 90, figs. 1-2.

Picus poliocephalus LICHENSTEIN, Preis-Verz. Mex. Vög., 1830, p. 1 (*nom. nud.*) (Mexico); *Id.*, Journ. für Ornith., 1863, p. 55 (reprint).

Chloronerpes æruginosus GRAY, Gen. Bds. III, 1849, App., p. 22; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 81; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 406; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 129.

Range: Eastern Mexico (Vera Cruz, Puebla, San Luís Potosí, Nueva León, and Tamaulipas).

2: Mexico (Vera Cruz 1, Puebla Viego 1).

Chloronerpes auricularis *Salvin and Godman.* GODMAN'S WOODPECKER.

Chloronerpes auricularis SALVIN and GODMAN, Ibis, 1889, p. 381 (Xautipa, Sierra Madre del Sur, Guerrero, Mexico); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 83; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 408, pl. 59a, fig. 3; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 128.

Chloronerpes godmani HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 83 (Jalisco, Mexico); SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 409, pl. 59a, figs. 1-2.

Range: Southwestern Mexico (Guerrero, Jalisco, southern Sinaloa, etc.).

***Chloronerpes rubiginosus rubiginosus** (*Swainson*). SWAINSON'S GREEN WOODPECKER.

Picus rubiginosus SWAINSON, Zool. Illustr., Ser. 1, 1820, pl. 14 and text ("Spanish Maine" = Cumana, Venezuela)[a].

[a] Type locality as fixed by Hellmayr, Nov. Zool., XIII, 1906, p. 38.

Chloronerpes rubiginosus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 86, part; BERLEPSCH, Nov. Zool., XV, 1908, p. 271 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 483 (Anarika River; Mt. Roraima; Macauria R.; Mazaruni R.; Merume Mts.; Kamarang R.).

Chloronerpes rubiginosus rubiginosus HELLMAYR, Nov. Zool., XII, 1906, p. 38, part (Cumana and Los Palmales, Venezuela); HELLMAYR and SEILERN, Arch. für Naturg., Abt. A, 5 Heft, 1912, p. 149 (Cumbre de Valencia; Mt. Bucarito; Tucuyo, Venezuela); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 126, in key.

Range: British Guiana and coast region of Venezuela.

1: Venezuela (Macuto, Caracas).

***Chloronerpes rubiginosus trinitatis** *Ridgway*. TRINIDAD GREEN WOODPECKER.

Chloronerpes rubiginosus trinitatis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 32 (Princetown, Trinidad); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 126, in key.

Range: Island of Trinidad.

2: Trinidad.

***Chloronerpes rubiginosus tobagensis** *Ridgway*. TOBAGO GREEN WOODPECKER.

Chloronerpes rubiginosus tobagensis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 33 (Tobago); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 127, in key.

Range: Island of Tobago.

9: Tobago.

Chloronerpes rubiginosus meridensis *Ridgway*. MERIDA GREEN WOODPECKER.

Chloronerpes rubiginosus meridensis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 33 (Merida, Venezuela); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 126, in key.

Range: Andes of Merida, Venezuela.

Chloronerpes rubiginosus buenavistæ *Chapman*.[a] BUENA VISTA GREEN WOODPECKER.

Chloronerpes rubignosus buenavistæ CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 386 (Buena Vista, above Villavicencio; 4500 ft., eastern Andes, Colombia); *Id.*, XXXVI, 1917, p. 348.

Range: Eastern Andes of Colombia (region of Buena Vista).

[a] *Chloronerpes rubiginosus buenavistæ* CHAPMAN: "Similar to *C. r. meridensis*, but upperparts and olive bars of underparts darker, cheeks grayer, bill longer; similar to *C. r. canipileus* (d'Orb.) but with much more red and consequently darker, less golden in color. Similar to *C. r. alleni* (BANGS) but olive bars of underparts wider and yellowish ones narrower; tail always (?) unbarred; posterior underparts, especially lower tail coverts, less distinctly barred." (CHAPMAN, *l. c.*).

***Chloronerpes rubiginosus alleni** *Bangs*. ALLEN'S GREEN WOODPECKER.

Chloronerpes rubiginosus alleni BANGS, Proc. New Eng. Zool. Club, III, 1902, p. 83 (San Sebastian, Santa Marta, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 126, in key.

Range: Sierra Nevada de Santa Marta, Colombia.

1: "Colombia."

***Chloronerpes rubiginosus uropygialis** (*Cabanis*). COSTA RICAN WOODPECKER.

Chloronerpes uropygialis CABANIS, Journ. für Ornith., X, 1862, p. 321 (Cerro de la Candelaria, Costa Rica).

Chloronerpes rubiginosus uropygialis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 133.

Range: Costa Rica and western Panama.

7: Costa Rica (Guayabo 4, Turrialba 1, Cartago 1, "Costa Rica" 1).

***Chloronerpes rubiginosus yucatanensis** (*Cabot*). YUCATAN WOODPECKER.

Picus yucatanensis CABOT, Proc. Boston Soc. N. H., 1844, p. 164 (Yucatan).

Chloronerpes yucatanensis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 84, part (Yucatan).

Chloronerpes rubiginosus yucatanensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 131; BANGS, Auk, 1915, p. 168 (Cabot's types).

Range: Southern Mexico (Vera Cruz, Oaxaca, Yucatan, etc.), Guatemala, Salvador, Honduras, to Nicaragua (San Rafaél del Norte, Matagalpa, etc.).

6: Guatemala 1; Nicaragua (San Raphaél del Norte 1, San Gerónimo 4).

Chloronerpes rubiginosus rubripileus[a] (*Salvadori and Festa*). RED-CROWNED GREEN WOODPECKER.

Chloronerpes rubripileus SALVADORI and FESTA, Boll. Mus. Zool. Torino, XV, 1900, p. 14 (Forests of Rio Peripa, western Ecuador).

C[hloronerpes] r[ubiginosus] rubripileus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 348, in text, crit.

Range: Western Ecuador.

Chloronerpes rubiginosus gularis (*Hargitt*). HARGITT'S GREEN WOODPECKER.

Chloronerpes gularis HARGITT, Ibis, 1889, p. 230 (Santa Elena, Antioquia, Colombia); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 86.

[a] *Chloronerpes rubiginosus rubripileus* SALVADORI and FESTA: Approaches *C. r. gularis*, but smaller; rump paler, and throat more extensively spotted (often to base of bill).

Chloronerpes rubiginosus gularis HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1187 (Loma Hermosa; Rio Jamaraya, western Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 127; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 347, crit. (La Frijolera, San Antonio, Andes west of Popayan, Cerro Munchique, Cali, Miraflores, Salento, Sta. Elena, Barro Blanco, west of Honda, La Candela (intermediate).

Range: Western and central Andes, Colombia.

Chloronerpes rubiginosus canipileus (*d'Orbigny*). BOLIVIAN GREEN WOODPECKER.

Picus canipileus d'ORBIGNY, Voy. Am. Mer., IV, 1835-44, p. 379 (Chupé, Yungas, Bolivia).

Chloronerpes canipileus GRAY, List. Picidæ, Brit. Mus., 1868, p. 104, part; BERLEPSCH and STOLZMAN, Proc. Zool. Soc. Lond., 1902, p. 32, in text, crit.; TACZANOWSKI, Orn. Pérou, III, 1886, p. 82.

Range: Bolivia and southeastern Peru.

Chloronerpes rubiginosus tucumanus (*Cabanis*).[a] TUCUMAN GREEN WOODPECKER.

Chloronerpes tucumanus CABANIS, Journ. für Ornith., 1883, p. 103 (Tucuman, northern Argentina); SCLATER and HUDSON, Argentine Orn., II, 1889, p. 21.

Chloronerpes rubiginosus tucumanus HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 228 (Tucuman).

Range: Northern Argentina.

Chloronerpes chrysogaster *Berlepsch and Stolzman.*[b] GOLDEN-BELLIED WOODPECKER.

Chloronerpes chrysogaster BERLEPSCH and STOLZMAN, Proc. Zool. Soc. Lond., 1902, p. 32 (Garita del Sol and La Gloria, central Peru); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 127, in key.

Range: Central Peru.

Genus CHRYSOPTILUS Swainson.

Chrysoptilus Swainson, Faun. Bor-Amer., 1831, p. 300 (Type *Picus guttatus* Spix).

Key to the Species and Subspecies.

A—Under parts spotted or nearly plain.

a—Wing more than 125 mm.

a^1—A conspicuous black stripe or patch extending behind the malar stripe; chest washed with orange.

[a] *Chloronerpes rubiginosus tucumanus* (CABANIS): Differs chiefly in larger size and duller coloration. The under surface lacks the yellowish tinge.

[b] This may prove to be a race of *rubiginosus* (see Ridgway, *l. c.*, footnote).

1—Black stripe behind malar stripe long; ground color of under parts whitish; middle of belly slightly tinged with pale yellow; ground color of rump yellowish white or pale yellowish..... ..... *Chrysoptilus melanolæmus*
(Bolivia and northern Argentina; Chile?)

2—Black patch behind malar stripe much smaller; ear coverts washed with golden buff; rump golden yellow; under parts with tinge of greenish..... *Chrysoptilus nigroviridis.*
(Rio Pilcomayo, western Paraguay).

b¹—No conspicuous black stripe behind malar region; chest not washed with orange.

1—Ground color of underparts deep yellowish green..... ..... *Chrysoptilus melanochlorus melanochlorus.*
(Wooded coast regions of southeastern Brazil, from Espirito Santo to Rio Grande do Sol.)

2—Ground color of underparts strongly golden yellow (adult), or pale greenish yellow with pear-shaped markings (immature)..... ..... *Chrysoptilus melanochlorus cristatus.*
(Paraguay, and adjacent region of the Parana R., Prov. Parana, Brazil; and northeastern Argentina and Uruguay.)

3—Ground color of underparts dull yellowish or pale greenish yellow. Spots on under parts smaller; throat streaks narrower. Wing, male, 126–129; bill, 23–24.... *Chrysoptilus melanochlorus nattereri.*
(Central Brazil, Matto Grosso; Goyaz; northwestern Minas Geraes; northeastern São Paulo, etc.)

4—Similar to *C. m. nattereri*, but brighter; throat washed with yellow. Wing 131–134; bill 26–28 mm..... *Chrysoptilus melanochlorus juæ.*
(Northeastern Brazil, Ceará.)

5—Ground color of under parts yellow; spots on underparts larger; throat streaks heavier; size larger. Wing 132–135; bill 26–29 mm. ..... *Chrysoptilus melanochlorus flavilumbis.*
(Eastern Brazil, Minas Geraes and Bahia.)

b—Wing less than 125 mm.

a¹—Throat black, *spotted* with white.

1—Upper parts brownish golden olive; bill shorter; wing about 110 mm..... *Chrysoptilus punctigula punctigula.*
(Cayenne and Surinam.)

2—Upper parts slightly more golden olive; bill longer; wing about 112..... *Chrysoptilus punctigula guttatus.*
(Amazon region from northeastern Brazil to eastern Peru and southeastern Colombia.)

3—Upper parts much less golden and more green; size larger; wing about 118 mm..... *Chrysoptilus punctigula punctipectus.*
(Venezuela and eastern Colombia.)

4—Upper parts approaching *punctipectus*, but throat blacker with white spots smaller; breast more heavily spotted..... ..... *Chrysoptilus punctigula zuliæ.*
(Lower Catatumbo River region, western Venezuela.)

5—Black spots on underparts, especially chest and flanks, very large; rump and upper tail coverts only slightly yellowish, and heavily barred with black..... *Chrysoptilus punctigula notata.*
(Colombia, definite, locality unknown.)

b[1]—Throat white, *streaked* with black.

1—Black bars on upper parts broad; spots below, especially on flanks, larger..... *Chrysoptilus punctigula striatigularis.*
(Interior of Colombia west of the Eastern Andes.)

2—Black bars on upper parts smaller and narrower and more or less obscure; spots on underparts smaller and less numerous.....
..... *Chrysoptilus punctigula ujhelyii.*
(Arid coast region of northern Colombia.)

B—Underparts barred.

1—Chin and throat uniform black; larger belly more or less banded.....
..... *C. atricollis atricollis.*
(Peru except extreme northwestern portion.)

2—Similar but smaller; belly immaculate..... *Chrysoptilus atricollis lymani.*
(Northwestern Peru.)

***Chrysoptilus melanolæmus melanolæmus** (*Malherbe*).[a] BLACK-THROATED WOODPECKER.

Picus melanolæmus MALHERBE, Mon. Picidæ, II, 1862, p. 188; IV, 1862, pl. 89, figs. 7-8 (Bolivia).

Chrysoptilus melanolæmus GRANT, Ibis, 1911, p. 321 (Los Ynglases, Ajo, 50 miles south of Buenos Aires, Argentina, and Goya, near Parana River, northeastern Argentina).

Chrysoptilus cristatus SCLATER and HUDSON, Argentine Orn., 1889, p. 21; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 112, part (Bolivia and Argentina).

Range: Bolivia and northern, northwestern and northeastern Argentina;[b] Uruguay; Chile?

2: Argentina (Tapia, Tucuman) 2.

[a] See remarks by Hargitt, Cat. Bds. Brit. Mus., XVIII, 1890, p. 112, footnote, regarding the type of *melanolæmus* Malherbe.

NOTE: Considerable uncertainty exists regarding records for *cristatus* and *melanolæmus* (largely due to confusion of the names by several writers); several such records I have intentionally omitted.

[b] A good series of specimens from Bolivia and northeastern Argentina should be compared. I am strongly inclined to believe that birds from northeastern Argentina (Buenos Aires), etc., and Uruguay, should be separated subspecifically from those from Bolivia and northern and western Argentina. Seven specimens from Conchitas, Buenos Aires, differ from two from Province de Tucuman and two from Mendoza in having a relatively shorter wing and bill and the dark coloration of the back, wings, and tail distinctly more brownish black (less deep black). The under surfaces of the outer tail feathers have a middle stripe of yellowish olive bordering the shaft on both webs, and the under surface of the outer webs of the first and second outer tail feathers are barred, while in birds from Tucuman and Mendoza the yellowish olive stripe is absent and the under surface of the second outer feather is immaculate deep black, except at the extreme tip. Should these differences prove constant I propose to name the eastern bird *Chrysoptilus melanolæmus perplexus.* Type from Conchitas Buenos Aires. Wing, 145; bill 29.

Chrysoptilus nigroviridis *Grant.*[a] BLACK AND GREEN WOODPECKER.

Chrysoptilus nigroviridis GRANT, Ibis, 1911, p. 321 (Rio Pilcomayo, western Paraguay).

Range: Paraguay (region of Rio Pilcomayo; Mortero, etc.).

Chrysoptilus melanochlorus melanochlorus (*Gmelin*). WAGLER'S WOODPECKER.

Picus melanochlorus GMELIN, Syst. Nat., I, 1788, p. 427 ("Cayenne," *errore* = Rio de Janeiro)[b]; ex. Daubenton, Pl. Enl., p. 719.

Picus chlorozostus WAGLER Isis, 1829, p. 513 (Brazilia).

(?) *Chrysopicus chlorostus* MALHERBE, Mon. Picidae, II, 1862, p. 183; IV, 1862, pl. 87, figs. 1-2.

Chrysoptilus chlorozostus BRABOURNE and CHUBB, Bds. S. Am., I, 1912, p. 170, No. 1692.

Chrysoptilus melanochlorus HELLMAYR, Verh. der Ornith. Gesell. Bayern, XII, Heft 2, 1915, p. 154, crit.

Range: Southeastern Brazil (Coast region from Espirito Santo to Rio Grande do Sol) and west to Iguassu Falls (west of St. Catharino); extreme northeastern Argentina.

Chrysoptilus melanochlorus cristatus (*Vieillot*). AZARA'S WOODPECKER.

Picus cristatus VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 98 (Paraguay); ex Azara.

Carpintero verdinegro AZARA, Apunt., II, 1805, p. 306.

Colaptes leucofrenatus LEYBOLD, Leopoldina, VIII, 1873, p. 53.

Chrysoptilus melanochlorus (*nec* Gmelin) HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 110, part; von Ihering, Revis. Mus. Paulista, VI, p. 333 (Paraguay).

Chrysoptilus cristatus HARTERT AND VENTURI, Nov. Zool., XVI, 1909, p. 226 (Mocovi; Rio de Oro; Tucuman; northern Argentina); Chubb, Ibis, 1910, p. 279 (Sapucay, Paraguay); Grant, Ibis, 1911, p. 321 (Alto Paraguay River, near Bahia Negra, extreme southeastern Bolivia).

Range: Paraguay; extreme southeastern Bolivia, northern Argentina and Uruguay.

***Chrysoptilus melanochlorus nattereri** (*Malherbe*). NATTERER'S BLACK AND YELLOW WOODPECKER.

Picus nattereri MALHERBE, Mem. Soc. Roy. Liége, 1845, p. 66 ("Du Bresil").

[a] *Chrysoptilus nigroviridis* GRANT: "Size rather larger than either *C. melanolæmus* or *C. cristatus;* above yellowish olive not so bright as in *C. cristatus;* rump as in *C. cristatus*, but paler; a strong indication of black behind the malar stripe, though nothing like to the extent in *C. melanolæmus;* ear coverts washed with golden buff; below yellowish olive, the chest strongly washed with orange. This appears to be quite a distinct form differing from *C. melanolæmus* in having the golden yellow rump and being greener below and from *C. cristatus* in having an indication of black behind the malar stripe and by the orange on the chest." (Grant, *l. c.*).

[b] Type locality substituted by Hellmayr, *l. c.*, 1915, p. 154.

Chrysoptilus icteromelas (*nec Picus icteromelas* Vieillot?) PELZELN, Orn. Bras., III, 1869, p. 248, part; ALLEN, Bull. Am. Mus. Nat. Hist., 1893, p. 129 (Chapada, Matto Grosso); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 114 (Cuyabá, Chapada).

Chrysoptilus nattereri HELLMAYR, Nov. Zool., XV, 1908, p. 80 (Goyaz; Faz. Esperanca; northwestern Minas Geraes; Rio Jordas; Prov. Araguay; northeastern São Paulo; Bebedouro; Matto Grosso; Chapada; Cuyabá; Caicara, Brazil).

Range: Central Brazil (Matto Grosso, Goyaz, northwestern Minas Geraes, northeastern São Paulo, etc.).

1: "Brazil."

Chrysoptilus melanochlorus flavilumbis (*Sundevall*). BLACK AND GOLD WOODPECKER.

Picus flavilumbis SUNDEVALL, Consp. Av. Picin., 1866, p. 74 (Bahia).

Chrysoptilus flavilumbis HELLMAYR, Nov. Zool., XV, 1908, p. 80, in text.

(?) *Chrysopicus chrysomelas* MALHERBE, Mon. Picidæ, II, 1862, p. 189.

Chrysoptilus chrysomelas HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 115 (Bahia and Pernambuco); NICOLL, Ibis, 1904, p. 40 (Bahia and Itaparica).

Range: Eastern Brazil (Minas Geraes, Bahia, etc.).

3: Brazil (Macaco Secco, near Andarahy, Bahia 2; Rio das Velhas, near Lagoa Santa, Minas Geraes 1).

Chrysoptilus melanochlorus juæ. *subsp. nov.*[a] JUA BLACK AND GOLD WOODPECKER.

Range: Province of Ceará, Brazil.

6: Brazil (Jua, near Iguatu, Ceará 5; Quixada, Ceará 1); including the type.

Chrysoptilus mariæ *Hargitt.*[b] MARIA'S WOODPECKER.

Chrysoptilus mariæ HARGITT, Ibis, 1889, p. 59 ("Chamicuros, eastern Peru"); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 115; SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 246 (Marajo Is., northeastern Brazil).

Range: Northeastern Brazil.

[a] *Chrysoptilus melanochlorus juæ* subsp. nov.: Type from Jua, near Iguatu, Ceará, Brazil. Male, No. 47252, Field Museum of Natural History. Collected by R. H. Becker, August 27, 1913.

Similar to *C. m. nattereri* (MALHERBE), but pale banding of upper parts more yellow; rump brighter and clearer yellow; throat washed with yellow. Wing, 130; tail, 108; bill, 26 mm.

[b] The type of *C. mariæ* should be carefully compared with specimens from northeastern Brazil and if identical the original type locality "Chamicuros" is probably an error. It is to be noted that the measurements given by Snethlage and those of the type do not agree. No specimens seen by me.

Chrysoptilus punctigula punctigula (*Boddaert*). CAYENNE WOODPECKER.

Picus punctigula BODDAERT, Tabl. Pl. Enl., 1783, p. 37 (Cayenne).

Chrysoptilus punctigula HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 116; BERLEPSCH, Nov. Zool., XV, 1908, p. 271 (Cayenne).

Chrysoptilus punctigula punctigula HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 607 (Surinam, Paramaribo and Cayenne); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 612, in key; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 305, in key; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 56 (Paramaribo, Surinam).

Range: Cayenne and Surinam; northern Brazil?[a]

Key to the races of *Chrysoptilus punctigula* (BODDAERT).

A — Throat black, *spotted* with white.
  a — Upper parts brownish golden olive; bill shorter; wing about 110. ..... *C. p. punctigula*
    (Cayenne and Surinam)
  b — Upper parts slightly more golden olive; bill longer; wing about 112 ..... *C. p. guttatus*
    (Amazon region, from northeastern Brazil to eastern Peru and southeastern Colombia)
  c — Upper parts much less golden and more green; size larger; wing about 118 ..... *C. p. punctipectus*
    (Venezuela and eastern Colombia)
  d — Upper parts approaching *punctipectus*, but throat blacker, with spots smaller; breast more heavily spotted. ..... *C. p. zuliæ*
    (Lower Catatumbo River region (Zulia), W. Venezuela)
  e — Black spots on underparts (chest and flanks) very large; rump and upper tail coverts only slightly yellowish and heavily barred with black ..... *C. p. notata*
    (Colombia definite type locality unknown)

B — Throat white, *streaked* with black
  a — Black bars on feathers of upper parts broad; spots below particularly on flanks larger ..... *C. p. striatigularis*
    (Interior of Colombia, west of the eastern Andes)
  b — Black bars on feathers of upper parts smaller and narrow and more or less obscure; spots on underparts smaller and less numerous ..... *C. p. ujhelyii*
    (Arid coast region of northern Colombia)

***Chrysoptilus punctigula guttatus** (*Spix*). SPIX'S WOODPECKER.

Picus guttatus SPIX, Av. Bras., I, 1824, p. 61, pl. LIII, fig. 1 ("in sylvis flum. Amazonum").

Chrysoptilus punctigula guttatus HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 607 (Rio Negro, Manaos and Santarem); *Id.*, Nov. Zool., XIV, 1907, p. 79 (Teffe, Rio Solimoes); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, p. 612, in key; CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 305, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 348 (La Morelia, Amazonian Colombia).

(?) *Chrysoptilus speciosus* MALHERBE (*ex* Sclater MS) Mon. Picidæ, IV, 1862, pl. LXXXVII, fig. 5[b].

[a] It is possible that the range of *C. p. punctigula* may be found to extend to the greater part of the Amazon Valley (*cf* Chapman, Bull. Am. Mus. Nat. Hist., p. 349, in text), and that the range of *C. p. guttatus* is confined to the upper Amazon region.

[b] I am in doubt regarding *C. speciosus* Malherbe. In this connection see Hellmayr, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 607, and Hargitt, Cat. Bds. Brit. Mus., XVIII, 1890, p. 117 (footnote).

Range: Amazonian region, from the lower Amazon (Santarem, etc.) Brazil, westward to northeastern Peru and southeastern Colombia.

2: Peru (Moyobamba).

***Chrysoptilus punctigula punctipectus** (*Cabanis and Heine*). SPOT-BREASTED WOODPECKER.

Chrysoptilus punctipectus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 163 (Venezuela).

Chrysoptilus punctigula punctipectus STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 200 (Cano, Corosal, Venezuela); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 612, in key; *Id.*, XXXVI, 1917, p. 349 (Buena Vista; Villavicencio; Barrigon, eastern Colombia); CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 306, in key; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 305 (Orinoco River, from Ciudad Bolivar to Apure, Venezuela).

Range: Venezuela and eastern Colombia.

3: Venezuela (Maracay, Aragua 1; Cumana 2).

***Chrysoptilus punctigula zuliæ** *Cory*.[a] ZULIA WOODPECKER.

Chrysoptilus punctigula zuliæ CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 305 (Encontrados, Zulia, western Venezuela).

Range: Low-forested region (Lower Catatumbo R., etc.), northwestern Venezuela.

8: Venezuela (Encontrados, Zulia, 4; Catatumbo 2; La Ceiba, Trujillo 2).

***Chrysoptilus punctigula notata** *subsp. nov.*[b] LARGE-SPOTTED WOODPECKER.

Range: Colombia.

1: "Colombia," the type.

[a] *Chrysoptilus punctigula zuliæ* CORY: Similar to *C. p. punctipectus* from Cumana, Venezuela, in general coloration of upper parts, but differs in having the throat much blacker, the white spots being much smaller, and the under parts, except middle of lower abdomen, with rounded black spots somewhat approaching *C. p. guttatus* from northern Peru. It differs from *C. p. guttatus* from Peru in its much more olive and less golden green back with smaller and narrower black bands on the upper parts; smaller white spots on the throat and lack of reddish tinge on the lower throat and upper breast (the last character may vary with age). From *C. p. ujhelyii* and *C. p. striatigularis* it may be distinguished at a glance by its spotted (not streaked) throat, more heavily banded upper parts, and other characters. Wing, 99; tail, 70; bill, 21; tarsus, 18 mm.

[b] *Chrysoptilus punctigula notata* subsp. nov.: Type from Colombia. Male, No. 11697; received from C. Balen. General coloration approaching *C. p. zuliæ*, but spotting very different. Throat black, merely sparsely speckled with white; under parts, including flanks, heavily spotted with black (some spots on the chest measuring 6 mm. in width); bars on outer tail feathers more obscure; rump and upper tail

Chrysoptilus punctigula striatigularis *Chapman.* STREAK-THROATED WOODPECKER.

Chrysoptilus punctigula striatigularis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 611 (Cali, 3500 ft., Cauca Valley, Colombia); *Id.*, XXXVI, 1917, p. 350 (Noanama; Cali; Rio Frio; Honda; Puerto Barrio, Colombia).

Range: Interior of Colombia, west of eastern Andes.

***Chrysoptilus punctigula ujhelyii** (*Madarasz*). UJHELYI'S WOODPECKER.

Chrysoptilus ujhelyii MADARASZ, Orn. Monats., XX, 1912, p. 97 (Aracataca, Santa Marta, Colombia).

Chrysoptilus ujhelyii CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 612, in key; *Id.*, XXXVI, 1917, p. 249 (Lower Atrato; La Playa; Calamar, northern Colombia); CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 306, in key.

Range: Arid coast region of northern Colombia.

1: Colombia (Atrato R.).

***Chrysoptilus atricollis atricollis** (*Malherbe*). BLACK-NECKED WOODPECKER.

Chrysopicos atricollis MALHERBE, N. Classif. Mem. Acad. Metz, 1848-49, p. 355 (Peru).

Chrysopicus atricollis MALHERBE, Mon. Picidæ, II, 1862, p. 178; IV, pl. 88, fig. 4.

Chrysoptilus peruvianus REICHENBACH, Scans. Picinæ, 1854, p. 419, pl. DCLXXX, figs. 4493-4494.

Chrysoptilus atricollis TACZANOWSKI, Orn. Pérou, III, 1886, p. 86 (Callacte Chachapoyas); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 118 (Pacasmayo R.; Lima).

Range: Peru.

2: Peru (Menochucho 1,[a] Hda. Llagueda, northeast of Otuzco 1).

Chrysoptilus atricollis lymani[b] *Bangs and Noble.* LYMAN'S BLACK-NECKED WOODPECKER.

Chrysoptilus atricollis lymani BANGS and NOBLE, Proc. N. E. Zool. Club, VI, 1918, p. 85 (Huancabamba, northwestern Peru).

Range: Northwestern Peru.

coverts only slightly tinged with yellowish (not strongly contrasting with black) and heavily marked with black, the irregular black bars extending in some cases entirely across the feathers; wing longer. Wing, 108; tail, 78; bill, from front of nostril, 18 mm. The type specimen was secured by this Museum Oct. 31, 1893, with other specimens collected in Colombia by C. Balen. The label is merely marked Colombia with no date or definite locality.

[a] The adult male specimen from Menochuco has the shafts of all the tail feathers (upper surface) brilliant yellow for more than two-thirds of their length.

[b] *Chrysoptilus atricollis lymani* BANGS and NOBLE: Similar to *C. a. atricollis* (MALHERBE), but smaller; upper parts brighter and more yellowish; belly plain, pale yellow without bands.

Genus CELEUS Boie.

Celeus Boie, Isis, 1831, p. 542 (Type, as fixed by Gray, 1841, *Picus flavescens* Gmelin).

***Celeus flavescens flavescens** (*Gmelin*). BRAZILIAN YELLOW WOODPECKER.

Picus flavescens GMELIN, Syst. Nat., I, 1788, p. 427 ("Brasilia")[a]; SPIX, Av. Bras., I, 1824, p. 58, pl. XLIX, figs. 1-2.

Celeus flavescens BOIE, Isis, 1831, p. 542; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 422, part; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 604, part.

Celeus flavescens flavescens HELLMAYR, Nov. Zool., XV, 1908, p. 82 (Minas Geraes; Rio Janeiro, São Paulo); BERTONI, Ann. Soc. Cient. Arg., LXXV, 1913, p. 86 (Upper Parana R.).

Range: Southeastern and southern Brazil (Minas Geraes; Rio Janeiro; São Paulo; Parana).

4: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraes 2; "Brazil" 2).

***Celeus flavescens intercedens** *Hellmayr*.[b] HELLMAYR'S YELLOW WOODPECKER.

Celeus flavescens intercedens HELLMAYR, Nov. Zool., XV, 1908, p. 82 (Faz Esperanca, Goyaz, Brazil).

Range: Central eastern Brazil (Goyaz; Bahia, etc.).

2: Brazil (São Amaro, Bahia 1, "Brazil" 1).

***Celeus flavescens ochraceus** (*Spix*).[c] OCHRACEOUS WOODPECKER.

Picus ochraceus SPIX, Av. Bras., I, 1824, p. 59, pl. LI, fig. 1 ("*in sylvis amazonum*").

Celeopicus ochraceus MALHERBE, Mon. Picidæ, II, 1862, p. 23; IV, 1862, pl. LIV, figs. 5-6.

Celeus ochraceus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 425 (Ceará); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 604 (Spix's Types); *Id.*, Nov. Zool., XIV, 1907, p. 34 (Lower Amazon; Pernambuco?); PELZELN, Orn. Bras., 1871, p. 250 (Tapajos R.); RIKER and CHAPMAN, Auk, 1891, p. 31 (Santarem); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 251 (Monte Alegre; Cussary; Maranhão, northeastern Brazil).

Celeus flavescens ochraceus HELLMAYR, Nov. Zool., XV, 1908, p. 83 (Obidos, Ceará, etc., Pernambuco?).

Range: Lower Amazon region.

1: Brazil (Boa Vista, Rio Branco).

[a] I suggest State of Rio de Janeiro for the type locality.

[b] *Celeus flavescens intercedens* HELLMAYR: Similar to *C. f. flavescens*, but wings and bill shorter; crest shorter; bands on the back narrower. Male: wing, 142; bill, 25 mm.

[c] *Celeus flavescens ochraceus* (SPIX): Readily recognized by its much deeper coloration and the oval or cardiform blackish brown markings on the back, instead of bars. I am strongly inclined to give this bird specific rank.

Celeus lugubris (*Malherbe*). MOURNFUL WOODPECKER.

Picus lugubris MALHERBE, Mem. Soc. d'Hist. Nat. Mètz., 1851, p. 77 (Brazil).
Celeopicus lugubris MALHERBE, Mon. Picidæ, II, 1862, p. 19; IV, 1862, pl. LIV, figs. 1, 2, 3.
Celeus lubugris SCLATER, Cat. Am. Bds., 1862, p. 335; PELZELN, Orn. Bras., 1871, p. 250; ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 131 (Chapada, Matto Grosso, Brazil, and Piedra Blanca, Bolivia); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 424 (Piedra Blanca, Bolivia, and Matto Grosso, Brazil).

Range: Bolivia to central Brazil (southern Matto Grosso and Goyaz.)

Celeus roosevelti *Cherrie*.[a] ROOSEVELT'S WOODPECKER.

Celeus roosevelti CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 183 (Tapirapoan, Matto Grosso, Brazil).

Range: Matto Grosso, Brazil (Tapirapoan Region).

Celeus kerri *Hargitt*.[b] KERR'S WOODPECKER.

Celeus kerri HARGITT, Ibis, 1891, p. 605 (Rio Pilcomayo, Paraguay); Chubb, Ibis, 1910, p. 282 (Sapucay, Paraguay); GRANT, Ibis, 1911, p. 323 (Santa Roaz, Paraguay, Curuzu Chica, Paraguay; Pan de Azucar, Brazil).

Range: Paraguay (Pilcomayo River region) and Pan de Azucar, Brazil).[c]

Celeus immaculatus *Berlepsch*. IMMACULATE CRESTED WOODPECKER.

Celeus immaculatus BERLEPSCH, Ibis, 1880, p. 113 (Agua Dulce, Panama); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 426; SALVIN and GODMAN, Biol. Centr.-Am., Aves, II, 1895, p. 443; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 141.

Range: Panama.

Celeus elegans elegans (*Müller*). ELEGANT-CRESTED WOODPECKER.

Picus elegans P. L. S. MÜLLER, Natursys. Suppl., 1776, p. 92 (ex Daubenton, Pl. Enl., No. 524) (Cayenne).
Picus cinnamomeus GMELIN, Syst. Nat., I, 1788, p. 428 (ex Daubenton, pl. 524) ("Cayenna, Gujana, Carolina, *Australi*").
Celeopicus reichenbachi MALHERBE, Mon. Picidæ, II, 1862, p. 28; III, 1862, pl. LVI, figs. 4-5 ("Bresil et Colombie").

[a] *Celeus roosevelti* CHERRIE: Similar to *Celeus lugubris* (MALHERBE), but both outer and inner webs of secondaries and inner primaries hazel brown, regularly barred on inner webs with black.

[b] *Celeus kerri* HARGITT: Similar to *Celeus lugubris*, but differs in having the upper back, scapulars and wing coverts nearly black with a brownish or faint ochraceous tinge and the transverse markings narrower and fewer; under parts blackish brown, nearly as dark as back; under tail coverts less rufous; exposed rufous bars on secondaries much narrower; bases and barring on inner webs of primaries and secondaries white, or but very faintly tinged with yellow; size somewhat larger. Wing, 145; bill, 29 mm.

[c] As recorded by Grant, *l. c.*

Celeus elegans elegans HELLMAYR, Nov. Zool., XIII, 1906, p. 39 (Approuague, Cayenne).

Celeus elegans BERLEPSCH, Nov. Zool., XV, 1908, p. 272 (Ipousin, R. Approuague, Cayenne; Oyapoche, Cayenne).

Range: Cayenne.

***Celeus elegans approximans** *subsp. nov.*[a] PALE-CROWNED CRESTED WOODPECKER.

Celeus cinnamomeus (*nec.* Gmelin) PELZELN, Orn. Bras., 1871, p. 251 (Barra do Rio Negro; Forte do Rio Branco).

Range: Northern Brazil (Rio Negro and Rio Branco Region) and probably southwestern British Guiana (Quonga).[b]

5: Brazil (Base of Serra da Lua, near Boa Vista), including the type.

Celeus elegans leotaudi *Hellmayr.*[c] TRINIDAD CRESTED WOODPECKER.

Celeus elegans leotaudi HELLMAYR, Nov. Zool., XIII, 1906, p. 39 (Valencia, Trinidad).

Range: Trinidad.

***Celeus elegans hellmayri** *Berlepsch.* HELLMAYR'S CRESTED WOODPECKER.

Celeus elegans hellmayri BERLEPSCH, Nov. Zool., XV., 1908, p. 272 (British Guiana);[d] STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 200 (Guinipa R., Venez, uela); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916-p. 307 (La Union, Caura R., Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 57 (Paramaribo, etc., Surinam).

Celeus hellmayri CHUBB, Bds. Brit. Guiana, I, 1916, p. 490.

[a] *Celeus elegans approximans* subsp. nov.: Type from Base of Serra da Lua, near Boa Vista, Rio Branco, Amazons, Brazil. Adult male, No. 50389, Field Museum of Natural History. Collected by M. P. Anderson and R. H. Becker, March 26, 1913. Similar to *Celeus elegans elegans* from Cayenne, but differs in having general coloration somewhat brighter; crown and rump averaging paler (more whitish); under wing coverts almost white (faintly buffy); size smaller. Wing, 160; tail, 110; bill, 26 mm. Females are decidedly smaller; wing, 155–158; tail, 97–102; culmen, 24–27.

[b] Although the five specimens before me from the Rio Branco region seem to be separable from typical *elegans elegans* from Cayenne (of which unfortunately I have seen but one specimen), it is possible a good series from French Guiana may prove them to be the same. The birds mentioned by Sclater from Quonga, southwestern British Guiana (Cat. Bds. Brit. Mus., XVIII, 1890, p. 428, in text) probably represent *approximans.*

[c] *Celeus elegans leotaudi* HELLMAYR: Differs from *C. e. elegans* from Cayenne in being decidedly smaller, etc. "Top of the head and crest pale cinnamon; back and upper wing coverts bright cinnamon rufous, the former as well as the smaller wing coverts with indistinct pale yellowish spots; under parts bright cinnamon rufous"; Wing, 139–142; tail, 106–117; bill, 29–31.

[d] The type is a male, collected by H. Whitely and the type locality as given by Berlepsch is "Brit. Guiana." The specimen should be examined, but if no more definite locality can be ascertained, I would suggest Cumacusa, Mazaruni River.

Celeus elegans reichenbachi HELLMAYR, Nov. Zool., XIII, 1906, p. 40 (Carimang, Cumacusa, etc., British Guiana; Orinoco Delta, northeastern Venezuela; Paramaribo, Surinam).

Range: Eastern Venezuela, British Guiana, Dutch Guiana.[a]

3: British Guiana (Mazaruni River 2, Demerara River 1).

***Celeus jumana** (*Spix*). SPIX'S AMAZONIAN WOODPECKER.

Picus jumana SPIX, Av. Bras., I, 1824, p. 57, pl. XLVII, figs. 1-2 ("in sylvis fl. Amazonum").

Celeopicus jumana MALHERBE, Mon. Picidæ, II, 1862, p. 27; III, 1862, pl. LV, figs. 1-2.

Celeus jumana HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 428; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 94 (Maipures, Guapare, etc., Orinoco Region); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 603 (Spix's Types); *Id.*, Nov. Zool., XII, 1905, p. 301 (Pará); *Id.*, XIV, 1907, p. 398 (Rio Madeira); *Id.*, XVII, 1910, p. 384 (Calama, Santa Isabel, Rio Madeira); BERLEPSCH, Nov. Zool., XV, 1908, p. 272 (Cayenne).

[a] Specimens from Dutch Guiana show considerable variation in the color of the crown and spotting of the back, and in general coloration (including crown) they agree very well with the few specimens I have seen from northern Venezuela, but none of the ten specimens before me from Dutch Guiana have the crown and rump so pale as in *elegans elegans* or so deep cinnamon as in typical *hellmayri*. HELLMAYR (Nov. Zool., XIII, 1906, p. 40) has already called attention to the fact that birds from Surinam have the crest somewhat paler and more ochraceous cinnamon than those from British Guiana. Surinam birds appear to be intermediate (especially in coloration of crown, rump and under surface of wing) between *elegans* and *hellmayri*, and the majority have the back conspicuously spotted or marked with yellowish, as in *elegans elegans*, although in two of the specimens, the back is practically uniform. This variation is suggestive, but until a larger series is available for comparison, it is impossible to judge how much it may be due to age or season, and I have provisionally referred Surinam birds to *hellmayri*, although they certainly do not represent the typical form of that race and may ultimately even prove worthy of subspecific recognition.

Key to the races of *Celeus elegans*.

A — Top of head and crest pale ochraceous buff or buffy white; rump, sides of body and under wing coverts buffy white or yellowish white.

1 — Crown more ochraceous buff.; chestnut coloration darker: size averaging larger; back spotted with yellowish; rump and under wing coverts not so whitish. Male, wing, 164 to 170; tail, 106 to 112; culmen, 29 to 31 mm.; female: wing, 168; tail, 112; culmen, 29 mm. ..... *Celeus elegans elegans* (Cayenne)

2 — Crown paler (more whitish buff): chestnut coloration paler (less chestnut): size averaging smaller; rump and under wing coverts more whitish or yellowish white; back nearly immaculate, or with narrow tawny bars or irregular spots. Male: wing, 160; tail, 110; culmen, 26; female: wing, 156–158; tail, 97–102; culmen, 24–27 mm..... *Celeus e. approximans* (Northern Brazil (Rio Branco region) and southwestern British Guiana (Quonga))

B — Top of head and crest cinnamon, or ochraceous cinnamon; rump, sides of body and under wing coverts more deeply yellowish, or tawny ochraceous.

1 — Size larger; crown darker; male: wing about 172; tail, 120; culmen, 31; female: wing, 164–167; tail, 110–112; culmen 27 mm. Back (always?) without yellowish spots ..... *Celeus e. hellmayri* (Northeastern Venezuela, British Guiana, Dutch Guiana?)

2 — Size smaller; crown paler cinnamon. Wing, 139–142; tail, 106–117; bill, 28–31..... *Celeus e. leotaudi* (Trinidad)

Celeus iumana SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 251 (Pará; Rio Tocantins; Rio Tapajoz, etc.).

Celeus jumana jumana HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen. XXVI, 2, 1912, p. 94 (Pará District).

Range: Northern Brazil, eastern Venezuela and Cayenne.

2: Brazil (Aramasso I., Amazon R., 1; Santarem 1).

Celeus citreopygius[a] *Sclater and Salvin.* CITRON-RUMPED WOODPECKER

Celeus citreopygius SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1867, pp. 753, 758 (Yurimaguas, Peru); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p, 429 (Sarayacu, Ecuador; Yurimaguas, Chamicuros, Samira and Iquitos, Peru); GOODFELLOW, Ibis, 1902, p. 210 (Coca, Rio Napo, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 251.

Range: Northeastern Peru and Ecuador.

***Celeus undatus undatus** (*Linnæus*). WAVED WOODPECKER.

Picus undatus LINNÆUS, Syst. Nat., 12th ed., 1766, p. 175 (Cayenne).

Picus rufus GMELIN, Syst. Nat., I, 1788, p. 432 (Cayenne and Guiana); CABANIS, in Schomb. Reis. Guiana, III, 1848, p. 715; SALVIN, Ibis, 1886, p. 59 (Bartica Grove; Cumacusa; Merumé Mts., British Guiana); PELZELN, Orn. Bras., 1870, p. 253 (Barra de Rio Negro, northern Brazil); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 430 (Cayenne, Surinam and British Guiana).

Celeus undatus BERLEPSCH, Nov. Zool., XV, 1908, p. 273 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 490 (Cayenne; Surinam; British Guiana, and northern Brazil); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 57 (Javaweg, Surinam).

Range: The Guianas and northern Brazil.

1: British Guiana (Potaro).

Celeus undatus multifasciatus (*Malherbe*). MANY-BANDED WOODPECKER.

Picus multifasciatus MALHERBE, Mon. Picidæ, II, 1862, p. 16; III, 1862, pl. 1 figs. 4-5 (Bresil).

Celeus multifasciatus SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 252.

Celeus undatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 431 (Pará; Lower Amazon).

Celeus undatus multifasciatus BEEBE, Zoologica, II, 1916, p. 85 (Pará) HELLMAYER, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Northeastern Brazil.

***Celeus loricatus loricatus** (*Reichenbach*). FRASER'S WOODPECKER.

M[eiglyptes] loricatus REICHENBACH, Handb. Scansores, Picinæ, 1854, p. 405, pl. 681, figs. 4495-4496 (northern Peru).

[a] This may prove to be a subspecies of *jumana*.

Celeopicus fraseri MALHERBE, Mon. Picidæ, II, 1862, p. 16; III, 1862, pl. 43 bis fig. 5 (Babahoyo, western Ecuador)[a].

Celeus loricatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 432, part (Colombia and Ecuador); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1188 (Novita, Colombia).

Celeus loricatus loricatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 145, part (Colombia and western Ecuador), CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 353 (Puerto Valdivia; Alto Bonito; Baudo; Novita; Barbacoas, Colombia); Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 259 (Panama).

Range: Colombia (from Baudo on the northwestern coast, eastern side of the Atrato River and lower Magdalena Valleys, southward); western Ecuador and northeastern Peru.

1: "Colombia."

Celeus loricatus mentalis[b] (*Cassin*). TURBO WOODPECKER.

Celeus mentalis CASSIN, Proc. Acad. Nat. Sci. Phila., 1860, p. 137 (Turbo, Rio Atrato, Colombia).

Celeus squamatus LAWRENCE, Ibis, 1863, p. 184 (Lion Hill, Panama); BANGS, Proc. N. E. Zool. Club, II, 1900, p. 18 (Loma del Leon, Panama).

Celeus loricatus mentalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 144, footnote; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 354 (Rio Salaqui, Colombia).

Celeus innotatus TODD, Proc. Biol. Soc. Wash., XXX, 1917, p. 5 (Jaraquiel, Bolivar, Colombia).

Range: Northwestern Colombia, at least from the Lower Atrato River and Turbo, to eastern Panama (Canal Zone, etc.).

***Celeus loricatus diversus** *Ridgway*. TALAMANCA WOODPECKER.

Celeus loricatus diversus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 145 (Talamanca,[c] Costa Rica).

Range: Costa Rica; western Panama?

1: Costa Rica (Limon).

***Celeus castaneus** (*Wagler*). CHESTNUT-COLLARED WOODPECKER.

Picus castaneus WAGLER, Isis, 1829, p. 515 (ex Lichtenstein, M. S., no type locality).[d]

Picus badioides LESSON, Cent. Zool., II, 1830, p. 56, pl. 14 (Mexico=female).

[a] I have not seen specimens from Ecuador or Peru.

[b] *Celeus loricatus mentalis* (CASSIN): Similar to *C. l. loricatus*, but differs in having back and inner quills almost entirely without marking; underparts more ochraceous with narrower black marking; ochraceous tawny area on throat more extensive.

[c] Prof. Ridgway informs me that the type specimen was collected by Zeledon at Talamanca, Costa Rica.

[d] I suggest Vera Cruz, Mexico as an appropriate type locality.

Celeopicus castaneus MALHERBE, Mon. Picidæ, II, 1862, p. 25; III, 1862, pl. 50, figs. 1-2.

Celeus castaneus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 433 (Orizaba; Vera Cruz; Yucatan, etc., Mexico; British Honduras and Guatemala); RICHMOND, Proc. U. S. Nat. Mus., XVI, 1893, p. 518 (Graytown, Nicaragua); DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 91 (Los Amates, Guatemala); CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 591 (Costa Rica); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 141.

Range: Southeastern Mexico (states of Vera Cruz, Oaxaca, Tabasco and Yucatan), southward through Guatemala, British Honduras, Honduras, Nicaragua to Costa Rica (Rio Sícsola, Limón, Guayabo, etc.).

3: Guatemala (Chapulco 1, Los Amates 1); Yucatan 1.

Celeus grammicus (*Malherbe*). GEOMETRICAL WOODPECKER.

Picus grammicus MALHERBE, Mem. Soc. Roy. Liége, 1845, p. 69 ("Bresil," probably Rio Negro)[a].

Celeopicus verreauxii MALHERBE, Mon. Picidæ, II, 1862, p. 14; III, 1862, pl, 51, figs. 1-2.

Celeus grammicus SCLATER, Proc. Zool. Soc. Lond., 1858, p. 74; PELZELN, Orn. Bras., 1870, p. 252 (Taczanowski), Orn. Pérou, III, 1886, p. 96; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 434 (Oyapock, Cayenne; Sarayacu, Ecuador; Ucayali, Peruvian Amazons); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 94 (Munduapo and Nericagua, Rio Orinoco, southern Venezuela); HELLMAYR, Nov. Zool., XIV, 1907, p. 80 (Teffe, Rio Solimoes, Brazil); *Id.*, p. 398 (Humaytha, Rio Madeira, Brazil); *Id.*, 1910, p. 384 (Calama and Allianca, Rio Maderia); BERLEPSCH, *Ib.*, XV, 1908, p. 273 (Oyapock, Cayenne).

Range: Cayenne, northern Brazil, southern Venezuela, eastern Ecuador and Peru.

Celeus spectabilis *Sclater and Salvin*. FULVOUS-RUMPED WOODPECKER.

Celeus spectabilis SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1880, p. 161 (Sar. ayacu, Ecuador); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 435, pl. X (Sarayacu).

Range: Ecuador.

Genus CERCHNEIPICUS Bonaparte.

Cerchneipicus Bonaparte, Ateneo Italiano, II, 1854, p. 123 (Consp. Volucr. Zygod, 1854, p. 9); (Type, fixed by Gray, 1855, *Picus tinnunculus* Wagler).

***Cerchneipicus torquatus** (*Boddaert*). RINGED WOODPECKER.

Picus torquatus BODDAERT, Tabl. Pl. Enl., 1783, p. 52 (Cayenne).

Picus multicolor GMELIN, Syst. Nat., I, 1788, p. 429 (Cayenna).

Celeopicus multicolor MALHERBE, Mon. Picidæ, II, 1862, p. 34; IV, 1862, pl. 52, figs. 1-2.

[a] *Cf.* Hellmayr, *l. c.*, 1910, p. 384.

Celeus torquatus GRAY, Gen. Bds., II, 1846, p. 440.
Cerchneipicus torquatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 437; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 92 (La Pricion, Caura R., Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 273 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 252; CHUBB, Bds. Brit. Guiana, I, 1916, p. 491.

Range: The Guianas and northern Brazil.

1: Brazil (Base of Serra da Lua, near Boa Vista, Rio Branco, Amazonas).

***Cerchneipicus tinnunculus tinnunculus** (*Wagler*). SHRILL WOODPECKER.

Picus tinnunculus WAGLER, Isis, 1829, p. 516 (Brasilia).
Celeopicus tinnunculus MALHERBE, Mon. Picidæ, II, 1862, p. 36; IV, 1862, pl. 52, figs. 4-5.
Celeus tinnunculus BOIE, Isis, 1831, p. 542; PELZELN, Orn. Bras., 1870, p. 250.
Cerchneipicus tinnunculus BONAPARTE, Consp. Volucr. Zygod., 1854, p. 9; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 438 (Bahia).

Range: Southern Brazil (Bahia and Minas Geraes, southward).

1: "Brazil."

Cerchneipicus tinnunculus occidentalis (*Hargitt*). WESTERN WOODPECKER.

Cerchneipicus occidentalis HARGITT, Ibis, 1889, p. 230 (Upper Ucayali River); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 439, pl. XI (Upper Ucayali River, Peruvian Amazons and Samiria, eastern Peru); VON IHERING, Rev. Mus. Paulista, VI, 1905, p. 444 (Rio Jurus); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 253 (Rio Moju; Cussary; Rio Tapajoz, northern Brazil).
Cerchneipicus tinnunculus occidentalis HELLMAYR, Nov. Zool., XVII, 1910, p. 384 (Calama, Rio Madeira; Manaqueri; Caicara; Engenho do Gama).

Range: Eastern Peru and western Brazil.

Genus **CROCOMORPHUS** Hargitt.

Crocomorphus Hargitt, Cat. Bds. Brit. Mus., XVIII, 1890, p. 439 (Type *Picus flavus* Müller).

***Crocomorphus flavus flavus** (*P. L. S. Müller*). CHESTNUT-WINGED YELLOW WOODPECKER.

Picus flavus MÜLLER, Syst. Nat., 1776, p. 91 (Cayenne).
Pic jaune de Cayenne, Buffon, Hist. Nat. Ois., VII, 1780, p. 32; DAUBENTON, Pl. Enl., No. 509.
Picus citrinus BODDAERT, Tabl. Pl. Enl., 1783, p. 30, No. 509.
Picus exalbidus GMELIN, Syst. Nat., I, 1788, p. 428 (Cayenne).
(?) *Picus flavicans* LATHAM, Index Orn., I, 1790, p. 240.

Crocomorphus flavus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 440, part (Guiana and Cayenne); BERLEPSCH, Nov. Zool., XV, 1908, p. 273 (Cayenne); (?) BERLEPSCH and HARTERT, *Ib.*, IX, 1902, p. 94 (La Pricion; Altagracia; Caicara; Maipures, Orinoco Region, Venezuela); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull. II, No. 6, 1916, p. 308 (Maipures; Altagracia; Caicara, Venezuela); CHUBB, Bds. Brit. Guiana, I, 1916, p. 392, part (British Guiana and Cayenne).

Crocomorphus flavus flavus BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 57 (Paramaribo, Surinam); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Guiana, Cayenne, eastern and southern Venezuela.

2: British Guiana (Demerara River).

***Crocomorphus flavus inornatus**[a] *Cherrie.* CHERRIE'S YELLOW WOODPECKER.

Crocomorphus flavus inornata CHERRIE, Bull. Am. Mus. Nat. Hist., XXXV, 1916, p. 395 (Santarem, Rio Tapajoz, Brazil).

Picus flavicans SPIX, Av. Bras., I, 1824, p. 60, pl. 51, fig. 2 (♀).

Celeopicus exalbyus MALHERBE, Mon. Picidæ, II, 1862, p. 30; III, 1862, pl. 55, figs. 4-6.

Crocomorphus flavus subsp. HELLMAYR, Nov. Zool., XIV, 1907, p. 25 (Itaituba, near Santarem, Brazil); *Id.*, p. 80 (Teffe); *Id.*, p. 398 (Humaytha, Rio Madeira).

Crocomorphus flavus SNETHLAGE Bol. Mus. Goeldi, VIII, 1914, p. 253 (Pará Rio Gauma; Cussary; Bom Lugar and Ponte Alegre on Rio Purus; Rio Jamunda; Maranhão).

Celeus citrinus RIKER and CHAPMAN, Auk, 1891, p. 31 (Santarem).

Range: Northern Brazil.

1: Santarem, Brazil.

Crocomorphus flavus subflavus[b] (*Sclater and Salvin*). BAHIA YELLOW WOODPECKER.

Celeus subflavus SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1877, p. 21 (Bahia).

Range: Eastern Brazil (Bahia).

[a] *Crocomorphus flavus inornatus* CHERRIE: "Similar to *C. f. flavus*, but outer surface of wing fuscous, the coverts only with narrow, pale, sandy buff edges" (Cherrie, *l. c.*). Wing, 140 mm.

[b] *Crocomorphus flavus subflavus* (SCLATER and SALVIN): Differs from *C. f. flavus* in having little or no rufous on the wings; breast and upper back more or less marked with brownish black. Wing, 5.20 inches. I have seen no specimens of this bird from Bahia, but as the Amazonian form is now considered distinct from *C. flavus flavus* from Cayenne, etc., it certainly must be different. Whether or not it differs from *C. flavus inornatus* CHERRIE I am unable to say, but in this connection, it is worthy of note that immature birds of *C. f. flavus* are claimed to have the chest and upper back more or less spotted and marked with dark brown (cf. Hargitt, Cat, Bds. Brit. Mus., XVIII, 1890, p. 441, and Malherbe, Mon. Picidæ, II. p. 30; IV. pl. 55 (description and fig. 6, juv.)

***Crocomorphus flavus peruvianus**[a] *subsp. nov.* PERUVIAN YELLOW WOODPECKER.

Range: Northern Peru.

2: Peru (Lower Huallaga River).

Genus **CEOPHLŒUS** Cabanis.

Ceophlæus Cabanis, Journ. für Ornith., 1862, p. 176 (Type *Picus lineatus* Linnæus).

***Ceophlœus lineatus lineatus** (*Linnæus*). LINEATED WOODPECKER.

Picus lineatus LINNÆUS, Syst. Nat., ed. 12, I, 1766, p. 174 (Cayenne); BODDAERT Tabl. Pl. Enl., 1783 (*ex* Daubenton, Pl. Enl., pl. 717).

Dryopicus lineatus MALHERBE, Mon. Picidæ, I, 1861, p. 39; III, 1862, pl. 12, figs. 4, 5, 6, 7; TACZANOWSKI, Orn. Pérou, III, 1886, p. 75 (Peru).

Ceophlæus lineatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 508, part; BERLEPSCH and STOLZMANN, Proc. Zool. Soc. Lond., 1902, p. 34 (La Merced; La Gloria, Peru); BERLEPSCH and HARTERT, Nov. Zool. IX, 1902, p. 95 (Caicara; Altagracia; Ciudad Bolivar, etc., Venezuela); HELLMAYR, Nov. Zool., XIII, 1906, p. 40 (Trinidad); *Id.*, XIV, 1907, p. 26 (Itaituba, Lower Amazon); BERLEPSCH, Nov. Zool., XV, 1908, p. 274 (Cayenne); CHUBB, Ibis, 1910, p. 283 (Sapucay, Paraguay); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 200 (Cariaquito, Venezuela); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 254 (Pará; St. Antonio do Prata; Marajo; Mexiana, etc., Brazil); HELLMAYR, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Ceophlæus lineatus lineatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 147, in key, part; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 58 (Paramaribo, Surinam).

Range: Eastern Colombia; Venezuela, Trinidad, the Guianas, northern Brazil, Ecuador and Peru; also recorded from southern Brazil, Paraguay, Bolivia, and northern Argentina, but birds from southern localities probably represent a different subspecies.[b]

16: British Guiana (Demerara River 1, Potaro 1, "British Guiana" 2); Dutch Guiana (Paramaribo) 2; Venezuela (Maracay 1, Rio Aurare 1, Guayabo 1, Orope, Zulia 2, Encontrados, Zulia 1); Brazil, (Boa Vista, Rio Branco 1, base of Serra da Lua, near Boa Vista 3).

***Ceophlœus lineatus improcerus** *Bangs and Penard.*[c] LESSER LINEATED WOODPECKER.

[a] *Crocomorphus flavus peruvianus* subsp. nov. Type from Lagunas, Lower Huallaga River, Peru. Adult female, No. 44588, Field Museum of Natural History. Collected by M. P. Anderson, October 17, 1912. Similar to *C. f. inornata* CHERRIE of the Amazon region, but differs in having the general plumage deeper yellow, decidedly orange yellow. Wing, 138; tail, 105; bill, 25 mm.

[b] Possibly *C. l. improcerus* BANGS and PENARD.

[c] *Ceophlæus lineatus improcerus* BANGS and PENARD: Similar to *C. l. lineatus* (Linn.), but smaller. Wing, 175–180.

Ceophlœus lineatus improcerus BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 58 (Bahia).

Range: Bahia, eastern Brazil.[a]

2: Brazil (São Marcello, Rio Preto, Bahia, 2).

***Ceophlœus lineatus mesorhynchus** (*Cabanis and Heine*). PANAMA LINEATED WOODPECKER.

Ceophlœus mesorhynchus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 86 (Costa Rica).

Ceophlœus lineatus lineatus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1189 (Noanama, western Colombia).

Ceophlœus lineatus mesorhynchus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 148; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 356 (Alto Bonito; Noanama; Cali; La Manuelita; Miraflores; Guengue; Puerto Berrio; Honda, Colombia).

Range: Central and southern Costa Rica, Panama and Colombia (west of the eastern Andes).

2: Panama 1; Costa Rica (mouth of Rio Matina) 1.

***Ceophlœus lineatus similis** (*Lesson*). WHITE-BILLED LINEATED WOODPECKER.

Picus similis LESSON, Compl. Œuvr. Buffon, XX, 1847, p. 204 (San Carlos, "republique du Centre-Amerique" = Salvador?).

Ceophlœus lineatus similis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 150.

Range: Eastern Mexico (in states of Nuevo León; Tamaulipas; San Luis Potosí; Vera Cruz; Oaxaca; Yucatan and Chiapas); Guatemala; British Honduras; Honduras; Salvador; Nicaragua and northern Costa Rica.

†14: Mexico (Tamaulipas 10, Yucatan 1); Guatemala (Los Amates, Isabel 1); Nicaragua (San Raphaél Del Norte 1, San Gerónimo 1).

Ceophlœus lineatus scapularis (*Vigors*). VIGOR'S LINEATED WOODPECKER.

Picus scapularis VIGORS, Zool. Journ., IV, 1829, p. 354 (San Blas, Tepic, western Mexico).

Ceophlœus scapularis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 510, part.

Ceophlœus lineatus scapularis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 152.

Range: Western Mexico in states of Sonora, Sinaloa, Jalisco, Colima, Guerrero, western Oaxaca and territory of Tepíc.

[a] Provisionally restricted to Bahia, but it is not improbable that all birds of this species from localities south of the Amazon River may represent this race. Specimens from northern Brazil (Boa Vista, Rio Branco) are unquestionaly *C. l. lineatus*.

Ceophlœus fuscipennis (*Sclater*). DUSKY-BILLED WOODPECKER.

Dryocopus fuscipennis SCLATER, Proc. Zool. Soc. Lond., 1860, pp. 286, 297 (Babahoyo).

Dryopicus fuscipennis MALHERBE, Mon. Picidæ, I, 1861, p. 165, III, 1862, pl. 41, fig. 1.

Ceophlœus fuscipennis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 512 (Babahoyo, Ecuador; Payta, Peru).

Range: Ecuador and Peru.

Ceophlœus erythrops (*Valenciennes*). RED-FACED WOODPECKER.

Picus erythrops VALENCIENNES, Dict. Sc. Nat., XL, 1826, p. 178 ("Bresil").

Dryocopus erythrops GRAY, Gen. Bds., II, 1845, p. 436; PELZELN, Orn. Bras., 1870, p. 243; SCLATER and HUDSON, Argentine Orn., II, 1889, p. 18.

Dryopicus erythrops MALHERBE, Mon. Picidæ, I, 1861, p. 42, III, 1862, pl. 12, figs. 1-2.

Picus melanotis SUNDEVALL, Consp. Av. Picin., 1866, p. 8.

Ceophlœus erythrops HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 512 (Pernambuco and Rio Grande, Brazil); CHUBB, Ibis, 1910, p. 283 (Sapucay, Paraguay).

Range: Eastern and southern Brazil, Paraguay and Argentina.

Ceophlœus galeatus (*Temminck*). HELMETED WOODPECKER.

Picus galeatus TEMMINCK, Pl. Col., 1823, p. 171 (Bresil); SUNDEVAL, Consp. Av. Picin., 1866, p. 8.

Dryocopus galeatus GRAY, Gen. Bds., II, 1845, p. 436.

Dryopicus galeatus MALHERBE, Mon. Picidæ, I, 1861, p. 38; III, 1862, pl. XI, figs. 1, 2, 3.

Ceophlœus galeatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 513; VON IHERING, Revis. Mus. Paulista, VI, 1904, p. 333 (Paraguay); CHUBB, Ibis, 1910, p. 284 (Sapucay, Paraguay).

Campephilus rufifrons BERTONI, Aves. Nuev. Paraguay, 1901, p. 49.

Range: Southeastern and southern Brazil, Paraguay and Argentina.

Genus **NEOPHLŒOTOMUS** Dabbene.

Neophlœotomus Dabbene, Anal. Mus. Nac. Hist. Buenos Aires, XXXII, 1915, p. 76, fig. 1 (Type *Phloeotomus schulzi* Cabanis).

Neophlœotomus schulzi (*Cabanis*). SCHULZ'S RED-CRESTED WOODPEDKER.

Phlœotomus schulzi CABANIS, Journ. für Ornith., 1883, p. 102 (Tucuman)*.

Campepilus schulzi SCLATER and HUDSON, Argentine Orn., II, 1889, p. 18.

Dryotomus schulzi HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 517; DABBENE, Anal. Mus. Nac. Buenos Aires, XXVII, 1910, p. 278.

Range: Northern Argentina (Tucuman to Cordoba).

* According to Dabbene (*l. c.*, XXXII 1915, p. 81), the type of *N. schulzi* came from the Province of Cordoba.

Neophlœotomus shiptoni[a] *Dabbene*. SHIPTON'S RED-CRESTED WOODPECKER.

Neoplœotomus shiptoni DABBENE, Anal. Mus. Nac. Buenos Aires, XXXII, 1915. p. 79, pl. 1, figs. 1-2 (Vipos, Province of Tucuman, alt. 500 ft., Argentina).

Range: Northern Argentina (Tucuman).

Genus PHLŒOTOMUS Cabanis and Heine.

Phlœotomus Cabanis and Heine, Mus. Hein., IV, 1863, p. 102 (Type, by monotypy, *Picus pileatus* Linnaeus).

***Phlœotomus pileatus pileatus** (*Linnæus*). PILEATED WOODPECKER.

Picus pileatus LINNÆUS, Syst. Nat., ed. 10, I, 1758, p. 113 (South Carolina): AUDUBON, Orn. Biog., II, 1834, p. 74, part, pl. III; *Id.*, Bds. Am., oct. ed., IV, 1842, p. 226, pl. 257, part.

Dryotomus pileatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 515, part.

Phlœotomus pileatus pileatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 155.

Range: Southeastern United States, from northern Florida (Gainesville, Mayport, etc.), west to central and southern Texas, and north to Arkansas, Oklahoma, southern Missouri, southern Indiana, southern Illinois, southeastern Pennsylvania and Maryland.

3: Arkansas (Bayou Meta 1); Tennessee (Avoca) 1; Louisiana (Telulah) 1.

***Phlœotomus pileatus floridanus** *Ridgway*. FLORIDA PILEATED WOODPECKER.

Phlœotomus pileatus floridanus RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 33 (Prevatt's Camp, 24 miles southwest of Kissimmee, Florida); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 159.

Range: Central and southern Florida.

2: Florida (West Jupiter) 2.

***Phlœotomus pileatus abieticola** (*Bangs*). NORTHERN PILEATED WOODPECKER.

Ceophlœus pileatus albieticola BANGS, Auk, 1896, p. 176 (Greenville, Maine), *Phlœotomus pileatus abieticola* RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 160.

Range: Northern United States (east of the Rocky Mountains) and Canada, from Keewatin, (Nelson River, etc.) Mackenzie (Great Slave Lake, etc.), Quebec, New Brunswick and Nova Scotia, south to West

[a] *Neophlœotomus shiptoni* DABBENE: Similar to *N. schulzi* (CABANIS) from the same region, but differs in having the shoulders marked with a white band and small transverse whitish streaks on sides of the breast (poitrine) and flanks. Wing, 163–168; tail, 115–119; culmen, 31–33 mm.

Virginia, western Pennsylvania, Ohio, northern Indiana, Illinois, etc., and west to the Rocky Mountains.

4: Wisconsin (Salon Springs) 1; Illinois (Grand Chain) 1, Ozark 1; New York 1.

***Phlœotomus pileatus picinus** *Bangs.* WESTERN PILEATED WOODPECKER.

Phlœotomus pileatus picinus BANGS, Proc. N. E. Zool. Club, IV, 1910, p. 79 (Sumas, British Columbia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 162.

Range: Northwestern United States and British Columbia, from Victoria, Departure Bay, etc., B. C., southward through Washington, Oregon and California to Mendocino Co., and Sierra Nevada Mountains; east to Idaho and western Montana.

1: Oregon (Logan).

Genus **CAMPEPHILUS** Gray.

Campephilus Gray, List. Gen. Bds., 1840, p. 54 (Type *Picus principalis* Linnæus).

Campophilus (emendation) Cabanis and Heine, Mus. Hein., 2, 1863, p. 100.

***Campephilus imperialis** (*Gould*). IMPERIAL WOODPECKER.

Picus imperialis GOULD, Proc. Zool. Soc. Lond., 1832, p. 140 ("California" = near Bolanos, Jalisco, Mexico)[a].

Megapicus imperialis MALHERBE, Mon. Picidæ, I, 1861, p. 2; II, 1862, pl. 1, figs. 1, 2, 3.

Dryotomus imperialis CASSIN, Illustr. Bds. California, etc., 1855, p. 285, pl. 49.

Campephilus imperialis BAIRD, Rep. Pacific R. R. Survey, IX, 1858, pp. 27, 82 (Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 166 (States of Sonora; Chihuahua; Durango; Zacatecas; Jalisco, and Michoacán, Mexico).

Campophilus imperialis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 465 (Durango); SALVIN and GODMAN, Biol. Centr. Am., Aves, II, 1895, p. 444 (Sonora; Durango; Jalisco).

Range: Northwestern Mexico, in States of Sonora; Chihuahua; Durango; Zacatecas; Jalisco and Michoacán.

†12: Mexico (Chihuahua 7; Coyotes, Durango 4; "Mexico" 1).

***Campephilus principalis** (*Linnæus*). IVORY-BILLED WOODPECKER.

Picus principalis LINNÆUS, Syst. Nat., ed. 10, 1758, p. 113 (Carolina).

Picus principalis BODDAERT, Tabl. Pl. Enl., 1783, p. 43; AUDUBON, Orn. Biog., I, 1831, p. 341, pl. 66; *Id.*, Bds. Am., oct. ed., IV, 1842, p. 214, pl. 256.

[a] See Salvin and Godman, Biol. Centr.-Am., Aves, II, 1895, p. 445, and Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 166, footnote.

Campephilus principalis BAIRD, BREWER and RIDGWAY, Hist. N. A. Bds., II, 1874, p. 496, pl. 49, figs. 1-2; RIDGWAY, Bull. Illinois State Lab., No. 4, 1881, p. 185 (formerly southern Illinois); BENDIRE, Life Hist. N. Am. Bds., II, 1895, p. 42; CORY, Field Mus. Nat. Hist., Zool. Ser., IX, 1909, p. 508, text and fig. (formerly southern Illinois); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 167.

Megapicus principalis MALHERBE, Mon. Picidæ, I, 1861, p. 4; III, 1862, pl. 1, figs. 4-5.

Campophilus principalis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 463 (De Soto Co., Argo, and Tarpon Springs, Florida).

Range: Formerly south Atlantic and Gulf states of the United States, from Texas to North Carolina, north in the Mississippi Valley to Okalhoma, Missouri, southern Illinois and southern Indiana and western Kentucky. Now extirpated over much of its former range and probably existing only in scattered localities in the lower Mississippi Valley and Florida.

†16: Florida (Blackwater River 2; Wekiva Creek, Volucia Co., 8; Kissimmee 2; southeast of Tampa 1; "Florida" 3).

***Campephilus bairdi** *Cassin.* CUBAN IVORY-BILLED WOODPECKER.

Campephilus bairdi CASSIN, Proc. Acad. Nat. Sci. Phila., XV, 1863, p. 322 (Cuba); GUNDLACH, Reprt. Fisico-Nat. Cuba, I, 1866, p. 293; *Id.*, Journ. für Ornith., 1866, p. 352; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 169.

Campephilus principalis bairdi CORY, Auk, 1886, p. 373; *Id.*, Bds. West Indies, 1889, p. 168.

Campophilus bairdi HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 465.

Range: Island of Cuba.

1: "Cuba."

Genus **SCAPANEUS** Cabanis and Heine.

Scapaneus Cabanis and Heine, Mus. Hein., IV, 1863, p. 90 (Type *Picus melanoleucus* Gmelin).

***Scapaneus leucopogon** (*Valenciennes*). WHITE-BACKED WOODPECKER.

Picus leucopogon VALENCIENNES, Dict. Sci. Nat., XL, 1826, p. 178, female ("Bresil").

Picus boiei WAGLER, Syst. Av. Picus, 1827, Sp. 3 (Bresil).

Megapicus boiei MALHERBE, Mon. Picidæ, 1861, III, pl. III, figs. 1-2.

Picus atriventris D'ORBIGNY, Voy. Amer. Merid., Ois., IV, 1835-44, p. 378, pl. LXIII, fig. 1.

Picus corrientes GRAY, Gen. Bds., III, 1849, App., p. 21.

Campephilus boiei WHITE, Proc. Zool. Soc. Lond., 1882, p. 617; BARROWS, Auk, 1884, p. 25; SCLATER and HUDSON, Argentine Orn., II, 1889, p. 17; KERR, Ibis, 1901, p. 228 (Gran Chaco); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 228 (Salta, Prov. de Santiago, Tucuman, Argentina).

Campephilus leucopogon HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 466 (Carrapari, Bolivia; Salta, Argentina; Uruguay); LÖNNBERG, Ibis, 1903, p. 468 (Tatarenda, near Caiza, Bolivian Chaco).

Range: Southern Brazil, Uruguay, Bolivia and Argentina.

3: Argentina (El Cedral, Dep. Oran, Prov. de Salta 2); "South America" 1.

***Scapaneus rubricollis** (*Boddaert*). RED-NECKED WOODPECKER.

Picus rubricollis BODDAERT, Tabl. Pl. Enl., 1783, p. 37, No. 612 (Cayenne).

Megapicus rubricollis MALHERBE, Mon. Picidæ, I, 1861, p. 25; III, 1862, pl. VIII, figs. 6-7.

Campephilus rubricollis GRAY, Gen. Bds., II, 1845, p. 346; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 95 (Suapure; La Pricion, on Caura R., Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 273 (Oyapock, Cayenne); CHUBB, Bds. British Guiana, I, 1916, p. 493; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 354 (Morelia, Colombia).

Campophilus rubricollis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 467 (Cayenne; Surinam; San José and Sarayacu, Ecuador); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1916, p. 253; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, 1918, p. 58 (Paramaribo, Surinam).

Range: Guiana, Cayenne, Surinam, Venezuela, northern Brazil, Ecuador and southern Colombia.

7: British Guiana (Mazaruni River 2, "British Guiana" 2); Dutch Guiana (Paramaribo) 1; Brazil (Base of Sierra da Lua, near Boa Vista, Rio Branco 1; Conceicão, Rio Branco 1).

***Scapaneus trachelopyrus** (*Malherbe*). MALHERBE'S RED-NECKED WOODPECKER.

Megapicus trachelopyrus MALHERBE, Mem. Soc. Hist. Nat. Moselle, 1857, p. 1 (Pérou); *Id.*, Mon. Picidæ, I, 1861, p. 26; III, 1862, pl. VIII, figs. 2-3.

Campephilus trachelopyrus SCLATER, Cat. Am. Bds., 1879, p. 332; TACZANOWSKI, Orn. Pérou, III, 1886, p. 73; HELLMAYR, Nov. Zool., XII, 1905, p. 300 (Pará); *Id.*, XIV, 1907, p. 25 (Santarem, Brazil); *Id.*, XVII, 1910, p. 385 (Calama, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Campophilus trachelopyrus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 469 (Pará, Capim River, Maranhão, Brazil; Yurimaguas and Cosnipata, Peru: Yungas, Bolivia; Chapada, Matto Grosso, Brazil).

Range: Northern, northeastern and western Brazil, Peru and Bolivia.

3: Peru (Pozuzo 1, Rioja 1, San Ramon 1).

***Scapaneus melanoleucos melanoleucos** (*Gmelin*).[a] BLACK AND WHITE WOODPECKER.

[a]*Scapaneus melanoleucos melanoleucos* (GMELIN): Specimens from Surinam and British Guiana, representing the typical form, have average measurements of wing, 186; tail, 140; bill, 40 mm.

Picus melanoleucos GMELIN, Syst. Nat., I, 1788, p. 426 (Surinam).

(?) *Picus albirostris* SPIX, Av. Bras., I, 1824, p. 56, pl. 45, figs. 1-2.

Megapicus albirostris MALHERBE, Mon. Picidæ, I, 1861, p. 17; III, 1862, pl. IV, figs. 1, 3.

Scapaneus melanoleucus CABANIS and HEINE, Mus. Hein., IV, 1862, p. 90.

Campephilus melanoleucus TACZANOWSKI, Orn. Pérou, III, 1866, p. 71; BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 95 (Maipures; Suapure; La Pricion, Venezuela); HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 602 (Spix's Types); BERLEPSCH, Nov. Zool., XV, 1908, p. 273 (Cayenne); CHUBB, Bds. Brit. Guiana, I, 1916, p. 495; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 355 (Florencia; Villavicencio, Colombia).

Campephilus melanoleucos ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 131 (Chapada, Matto Grosso, Brazil); HELLMAYR, Nov. Zool., XV, 1908, p. 83 (Faz Esperanca, city of Goyaz, Brazil); *Id.*, XVIII, 1910, p. 385 (Borba, Rio Madeira); STONE, Proc. Acad. Nat. Sci. Phila., 1913, p. 200 (Pedernales, northeastern Venezuela).

Campophilus melanoleucus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 470 (Guiana; Trinidad; Venezuela; Ecuador; Colombia; Peru; Matto Grosso, Brazil, etc.); GOODFELLOW, Ibis, 1902, p. 209 (Coca, Rio Napo, Ecuador).

Scapaneus melanoleucos melanoleucos BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 58 (Paramaribo and Topibo, Surinam).

Range: Guianas, Trinidad, Venezuela, Colombia, Ecuador, Peru and whole of Brazil (except the extreme northeastern portion).

8: British Guiana (Georgetown 1, Demerara River 1); Dutch Guiana (Paramaribo) 1; Brazil (Boa Vista, Rio Branco 3, Itacoatiara, R. Amazon 1); Peru 1.

***Scapaneus melanoleucos cearæ**[a] *Cory.* CEARÁ BLACK AND WHITE WOODPECKER.

Scapaneus melanoleucus cearæ CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 306 (Jua, near Iguatu, Ceará, Brazil).

Range: Northeastern Brazil (Prov. of Ceará); Bahia[b]?

5: Brazil (Jua, Ceará 3, including the type; ? Macaco Secco, near Andarahy, Bahia 2).[c]

***Scapaneus malherbii** (*Gray*). MALHERBE'S WOODPECKER.

Campephilus malherbii GRAY, Gen. Bds., II, 1845, pl. 108 (Bogotá, Colombia)[d]; SCLATER, Cat. Am. Bds., 1862, p. 331 (Bogotá, Colombia).

[a] *Scapaneus melanoleucos cearæ* CORY: Similar to *S. m. melanoleucos*, but much smaller; wing, 162; tail, 115; bill, 38 mm. (type). Average of three specimens, wing, 161; tail, 115, bill, 38 mm.

[b] Specimens before me from Macaco Secco, Bahia, are apparently intermediate in size between *S. m. melanoleucos* and *S. m. cearæ* and might be referred to either form although they approach nearer *cearæ*. A male from Bahia measures wing, 174; tail, 126; bill, 39 mm.

[c] *Cf.* Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 58, in text (Bahia specimens).

[d] No locality given, but Bogotá has been generally accepted by recent authors.

Campophilus malherbii HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 472.
Megapicus malherbii, MALHERBE, Mon. Picidæ, I, 1861, p. 15; III, 1862, pl. 6, figs. 1, 2, 4.
Campephilus malherbii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 172 (Panama, Colombia and western Venezuela); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 355 (Alto Bonito, Dabeiba, Peque, Novita, Noanamá, Puerto Valdivia, Las Lomitas, San Antonio, Andes w. of Popayan (10,340 ft.), Miraflores, Salento, Turbaco, La Palma, La Candela, Puerto Berrio, Colombia).
Scapaneus malherbii Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 259 (Gatun, Panama Canal Zone).

Range: Panama, Colombia and western Venezuela.

9: Colombia (Cauca 1, "Colombia" 1); Venezuela (Merida) 1; Encontrados, Zulia 3); Panama 1; "South America" 2.

***Scapaneus guatemalensis guatemalensis** (*Hartlaub*). GUATEMALAN IVORY-BILLED WOODPECKER.

Picus guatemalensis HARTLAUB, Rev. Zool., VII, 1844, p. 214 (Guatemala).
Megapicus guatemalensis MALHERBE, Mon. Picidæ, I, 1861, p. 19, part; III, 1862, pl. 7, figs. 1, 2, 3, 4, 5.
Campephilus guatemalensis STONE, Proc. Acad. Nat. Sci. Phila., 1890, p. 206 (Yucatan); CHERRIE, Auk, 1892, p. 327 (Costa Rica).
Campophilus guatemalensis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 473, part.
Campephilus guatemalensis buxans BANGS, Auk, 1901, p. 360 (Chiriquí, Panama).
Scapaneus guatemalensis guatemalensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 174.

Range: Southern Mexico (in states of Oaxaca, Tabasco, Yucatan, Campeche and Chiapas); Guatemala, British Honduras, Honduras, Salvador, Nicaragua, Costa Rica and western Panama.

†21: Guatemala (Patulul 1, Chapulco 1, Los Amates 1, "Guatemala" 2); Nicaragua (Matagalpa 1, Chinandiga 1, San Gerónimo 6); Costa Rica (Limón 3, Boruca 1, Guayabo 1, "Costa Rica" 2); Panama (Chiriquí) 1.

Scapaneus guatemalensis nelsoni *Ridgway*. NELSON'S IVORY-BILLED WOODPECKER.

Scapaneus guatemalensis nelsoni RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 34 (El Rincon, Guerrero, Mexico); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 178.

Range: Southwestern Mexico in states of Sinaloa, Jalisco, Colima, Michoacán and Guerrero.

***Scapaneus guatemalensis regius** (*Reichenbach*). VERA CRUZ IVORY-BILLED WOODPECKER.

Campephilus regius REICHENBACH, Handb. Scansores, Picinæ, 1854, p. 393, pl. 694, figs. 4331, 4332 (Papantla, Verz Cruz, Mexico).

Dryocopus regius LICHTENSTEIN, Nom. Am. Mus. Berol., 1854, p. 75 (Mexico; *nomen nudum*).

Scapaneus guatemalensis regius RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 178.

Range: Central-eastern Mexico, in states of Tamaulipas, San Luis Potosí, Mexico and Vera Cruz.

10: (Tamaulipas 3, San Luis Potosí 6, Vera Cruz 1).

***Scapaneus quayaquilensis** (*Lesson*). QUAYAQUIL WOODPECKER.

Picus quayaquilensis LESSON, Echo Mond. Sav., 1845, p. 920 (Quayaquil, Ecuador).

Megapicus sclateri MALHERBE, Mon. Picidæ, I, 1861, pp. 22, 156, 165; III 1862, pl. VIII, fig. 1, pl. XXXV, fig. 8.

Campephilus sclateri TACZANOWSKI, Orn. Pérou, III, 1886, p. 72.

Campophilus quayaquilensis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 475; GOODFELLOW, Ibis, 1902, p. 209 (Santo Domingo, Ecuador).

Range: Ecuador and Peru.

1: Ecuador (San José, southwestern Huigra).

***Scapaneus pollens pollens** (*Bonaparte*). POWERFUL WOODPECKER.

Picus pollens BONAPARTE, Atti Sest. Riun. Sci. Ital., 1845, p. 406 (Colombia).

Megapicus grayii MALHERBE, Mon. Picidæ, I, 1861, p. 13; III, 1862, pl. V, figs. 1, 2, 3.

Campephilus albifrenatus REICHENBACH, Scans. Picinæ, 1854, p. 431.

Campephilus pollens GRAY, List. Picidæ Brit. Mus., 1868, p. 55; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 355 (Cerro Munchique; La Florida; Cocal; Almaguer; Laguneta; Santa Isabel; El Roble).

Campophilus pollens HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 476; GOODFELLOW, Ibis, 1902, p. 209 (Western Ecuador).

Range: Colombia, western Venezuela and Ecuador.

5: Colombia 2; Venezuela (Paramo de Tama, near Colombian line 3).

***Scapaneus pollens peruvianus** *Cory*.[a] PERUVIAN POWERFUL WOODPECKER.

Scapaneus pollens peruviana CORY, Field Mus. Nat. Hist., Orn. Ser., I, 1915, p. 307 (Molinopampa, Peru).

Range: Peru.

1: Peru (Molinopampa, type of species).

[a] *Scapaneus pollens peruvianus* CORY: Similar to *S. p. pollens* from Colombia, but differs in having the under parts darker and more chestnut buff; the black bars heavier and clearly marked on the lower abdomen, flanks and under tail coverts; the white patch on the back more strongly tinged with buff; and the rump and the upper tail coverts deeper ochraceous buff without bars. Wing, 170; tail, 125; bill, 45 mm.

Genus **PHLŒOCEASTES** Cabanis.

Phlœoceastes Cabanis, Journ. für Ornith., 1862, p. 176 (Type *Picus robustus* Lichtenstein); Ridgway, Bull. U. S. Nat. Mus., No. 50, 1914, p. 10.

***Phlœoceastes robustus robustus** (*Lichtenstein*). ROBUST WOODPECKER.

Picus robustus LICHTENSTEIN, Verz. Doubl., 1823, p. 10 (Bahia, Brazil); SPIX Av. Bras., I, 1823, p. 10 (Bahia, Brazil); SPIX, Av. Bras., I, 1824, p. 56, pl. 44; DESCOURTILZ, Orn. Bras., 1852, pl. 19, fig. 4.

Phlœoceastes robustus CABANIS, Journ. für Ornith., 1862; CABANIS and HEINE, Mus. Hein., IV, 1863, p. 95.

Megapicus robustus MALHERBE, Mon. Picidæ, I, 1861, p. 23; III, 1862, pl. III, figs. 4, 5.

Campephilus robustus GRAY, Gen. Bds., II, 1845, p. 435; HELLMAYR, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 602 (Spix's types); *Id.*, Nov. Zool., XV, 1908, p. 83 (Faz Esperanca); CHUBB, Ibis, 1910, p. 283 (Sapucay, Paraguay).

Campophilus robustus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 477 (Bahia, etc.).

Range: Southern Brazil and Paraguay.

2: Brazil ("Cajoa" 1, "Brazil" 1).

Phlœoceastes robustus percoccineus (*Bonaparte*).[a] BONAPARTE'S ROBUST WOODPECKER.

Dryocopus percoccineus BONAPARTE, Consp. Gen. Av., I, 1850, p. 134 (Buen. Ayres).

Campephilus robustus percoccineus DABBENE, Bol. Soc. Physis, I, No. 6, 1914, p. 325, in text (Missiones, northeastern Argentina); BERTONI, An. Soc. Cient. Argent., LXXV, 1913, p. 86 (Missiones).

Range: Northeastern Argentina.

Genus **IPOCRANTOR** Cabanis and Heine.

Ipocrantor Cabanis and Heine, Mus. Hein., IV, 1863, p. 99 (Type *Picus magellanicus* King).

Ipocrantor magellanicus (*King*). MAGELLANIC WOODPECKER.

Picus magellanicus KING, Zool. Journ., III, 1828, p. 430 (Port Famine, Straits of Magellan).

Campephilus magellanicus GRAY, Gen. Bds., II, 1845, p. 436.

Megapicus magellanicus MALHERBE, Mon. Picidæ, I, 1861, p. 8; III, 1862, pl. 2, figs. 1-2.

Ipocrantor magellanicus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 480 (Straits of Magellan; Valdivia, Chile); LANE, Ibis, 1897, p. 48, crit. (Chile); CRAWSHAY, Bds. Tierra del Fuego, 1907, p. 37, pl. 11, figs. 1-2 (Punta Arenas; Valdivia; Useless Bay; Rio McClelland Settlement).

Range: Chile (south to Tierra del Fuego).

[a] *Phloeoceaster robustus percoccineus* (BONAPARTE): Similar to *P. r. robustus* from southeastern Brazil, but differs in being larger; crest somewhat more extended; and the head and neck more vivid red, etc.

Genus CNIPARCHUS Cabanis and Heine.

Cniparchus Cabanis and Heine, Mus. Hein., IV, 1863, p. 98 (Type *Picus hæmatogaster* Tschudi).

***Cniparchus hæmatogaster hæmatogaster** (*Tschudi*). CRIMSON-BELLIED WOODPECKER.

[*Picus*] *hæmatogaster* TSCHUDI, Wiegmann's Archiv. für Naturg., 1844, p. 302, pl. 25 (Peru).

Megapicus hæmatogaster MALHERBE, Mon. Picidæ, I, 1861, p. 27; III, 1862, pl. IX, figs. 1, 2, 3.

Campephilus hæmatogaster TACZANOWSKI, Orn. Pérou, III, 1886, p. 74; HARTERT, Nov. Zool., V, 1898, p. 497 (Cachavi, Ecuador).

Cniparchus hæmatogaster CABANIS and HEINE, Mus. Hein., IV, 1863, p. 98.

Campophilus hæmatogaster HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 479 (Bogotá; Roxario, Ecuador).

Range: Peru, eastern Ecuador and eastern Colombia.

3: Peru (Uchco) 1; Colombia (Bogotá 1, "Colombia" 1).

Cniparchus hæmatogaster splendens (*Hargitt*). SPLENDID WOODPECKER.

Campophilus splendens HARGITT, Ibis, 1889, p. 58 ("Bogotá" *errore* = Puerto Valdivia, Antioquia, Colombia)[a]; *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 480 (Calovevora; Santiago de Veraguas, Panama; Antioquia, Colombia).

Campephilus splendens HARTERT, Nov. Zool., V, 1898, p. 497 ("Paramba, Ecuador" crit.).

Cniparchus hæmatogaster splendens RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 181; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 355, crit. (Alto Bonito; Barbacoas; Puerto Valdivia, Colombia).

Range: Panama, western Colombia and western Ecuador.

Genus XIPHIDIOPICUS Bonaparte.

Xiphidiopicus Bonaparte, Ateneo Italiano, II, 1854, p. 126 (Consp. Volucr. Zygod., 1854, p. 11) (Type, by monotypy, *Picus percussus* Temminck).

***Xiphidiopicus percussus percussus** (*Temminck*). CUBAN GREEN WOODPECKER.

Picus percussus TEMMINCK, Pl. Col., 66 livr., IV, 1826, pls. 390, 424 and text (Cuba); D'ORBIGNY, in La Sagra's Hist. Fis. Cuba, Aves, 1839, p. 109.

Chloronerpes percussus GUNDLACH, Journ. für Ornith., 1856, p. 102.

Picus ruppellii WAGLER, Syst. Av., Picus, 1827, sp. 29; *Id.*, Isis, 1829, p. 509.

Xiphidiopicus percussus SCLATER, Cat. Am. Bds., 1862, p. 339; CORY, Auk, 1886, p. 379; *Id.*, Bds. West Indies, 1889, p. 171; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 377; CHAPMAN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 301.

[a] Type locality as suggested by Chapman, *l. c.*

Xiphidiopicus percussus percussus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 184.

Range: Island of Cuba.

8: Cuba (Palacios 2, Santiago de los Baños 1, "Cuba" 5).

Xiphidiopicus percussus insulæ-pinorum *Bangs*. ISLE OF PINES GREEN WOODPECKER.

Xiphidiopicus percussus insulæ-pinorum BANGS, Proc. Biol. Soc. Wash., XXIII, 1910, p. 173 (Sante Fé, Isle of Pines); READ, Bird Lore, XV, 1913, p. 45; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 185; TODD, Ann. Carnegie Mus., X, 1916, p. 240.

Range: Isle of Pines, near Cuba.

Genus **TRICHOPICUS** Bonaparte.

Trichopicus Bonaparte, Ateneo Italiano, II, 1854, p. 123 (Type, as fixed by Gray, 1855, *Picus cactorum* Lafresnaye and D'Orbigny); Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 10.

Trichopicus cactorum (*Lafresnaye and D'Orbigny*). YELLOW-CHINNED WOODPECKER.

Picus cactorum LAFRESNAYE and D'ORBIGNY, Voy. Amer. Mérid., IV, 1835-44, p. 378, pl. 42, fig. 2 (Mizque); Malherbe, Mon. Picidæ, I, 1861, p. 102; III, 1861, pl. 25, figs. 1-2; TACZANOWSKI, Orn. Pérou, III, 1886, p. 77; SCLATER and HUDSON, Argentine Orn., II, 1889, p. 19.

Trichopicus cactorum BONAPARTE, Consp. Volucr. Zygod., 1854, p. 8, No. 34.

Cactocraugus cactorum CABANIS and HEINE, Mus. Hein., IV, 1863, p. 72.

Melanerpes cactorum HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 162 (Bolivia; Argentina; Mendoza, Salta, Uruguay); KERR, Ibis, 1901, p. 228 (Gran Chaco); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 227 (Argentina; Tapia, Tucuman; La Solidad).

Range: Southern Peru, Bolivia, Paraguay, Uruguay, and Argentina.

Genus **VENILIORNIS** Bonaparte.

Veniliornis Bonaparte, Ateneo Italiano, II, 1854, p. 125 (Consp. Volucr. Zygod., 1854, p. 10 (Type, as designated by Gray, 1855, *Picus sanguineus* Lichtenstein).

Dendrobates (not of Wagler, 1830) Swainson, Fauna Bor.-Am., II, 1831, p. 300 (Type *Picus affinis* Swainson).

Eleopicus (subgenus) Bonaparte, Ateneo Italiano, II, 1854, (Type *Picus olivinus* Malherbe).

KEY TO SPECIES AND SUBSPECIES.

A—Rump and upper tail coverts red.

a—Back red.

1—Underparts white; wing about 78 mm.....
.....*Veniliornis callonotus callonotus*
(Ecuador.)

2—Similar, but larger; wing about 82 ..... *V. callonotus major.*
(Northern Peru.)

3—Underparts smoky blackish, narrowly barred with whitish; wing about 78 ..... *V. sanguineus.*
(Guiana and eastern Venezuela.)

b—Back not red.

b^1—Wing coverts with small spots or streaks.

1—Wing about 89 ..... *V. kirkii kirkii.*
(Tobago and Trinidad.)

2—Smaller; wing about 82 ..... *V. kirkii continentalis.*
(Venezuela.)

c^1—Wing coverts nearly or quite immaculate.

c^2—Dusky bars on underparts narrower.

1—Whitish bars narrower ..... *V. kirkii cecilii*
(Colombia and eastern Ecuador.)

2—Whitish bars broader ..... *V. kirkii dariensis.*
(Eastern Panama and western Ecuador.)

d^2—Dusky bars on underparts broader ..... *V. kirkii neglectus.*
(Southwestern Costa Rica to western Panama)

B—Rump and upper tail coverts not red.

a—Underparts uniform (not barred or spotted).

a^1—Sides of head paler than general coloration.

1—Wing about 100 ..... *V. oleaginus oleaginus.*
(Highlands of eastern Mexico, San Luis Potosí to Vera Cruz.)

b^1—Sides of head not distinctly paler than general coloration.

1—Coloration deeper; wing about 86 .... *V. oleaginus sanguinolentus.*
(Southern Vera Cruz, Mexico and southward to western Panama.)

2—Coloration duller; size larger; wing about 97. *V. oleaginus fumigatus.*
(Eastern Colombia; Ecuador; Peru; Bolivia and Argentina.)

3—Back and rump more golden; wing about 98 .. *V. oleaginus aureus.*
(Colombia and northern Ecuador; northeastern Colombia?)

4—Smaller; wing about 91 ..... *V. oleaginus reichenbachi.*
(Venezuela.)

b—More or less of underparts conspicuously barred or spotted.

b^1—No yellow nuchal band.

b^2—Wing coverts plain, without spots.

1—Back golden olive, with ends of feathers dull red, forming obscurely defined red spots; olive bars on underparts decidedly wider than buffy bars; top of head in female deep black .....
..... *V. nigriceps nigriceps.*
(Bolivia and Peru.)

2—Bars on underparts of about equal width. *V. nigriceps equifasciatus.*
(Colombia and northern Ecuador.)

3—Bars on underparts irregular; wing shorter; top of head in female olive ..... *V. nigriceps pectoralis.*[a]
(Central Peru.)

c^2—More or less of wing coverts marked with spots or streaks of yellow or white.

[a] The status of this form is uncertain. I have seen no specimens.

b^3—Lower belly not barred.

1—Lower belly and thighs dull buffy yellow; without bars; upper tail coverts barred..... *V. dignus.*
(Colombia and eastern Ecuador.)

2—Upper tail coverts nearly uniform; spots on wing coverts yellowish olive, usually bordered apically with red . *V. valdizani.*
(Central Peru.)

c^3—Entire belly barred.

c^4—Chest barred and belly barred.

c^5—Back with transverse spots or irregular bars of yellow.

1—Back with transverse yellow markings; wing 83 to 92 ..... *V. tænionotus tænionotus.*
(Eastern Brazil; Minas Geraes, Bahia, etc.)

2—Similar, but upper parts more golden; under parts paler; outer tail feathers much more strongly banded ..... *V. tænionotus cearæ.*
(Prov. of Ceará, northeastern Brazil.)

3—Upper parts with irregular yellow spots; chin and throat whitish with dusky spots; spots on wing coverts yellowish white; wing 92 to 98 mm..... ..... *V. frontalis.*
(Northern Argentina, Tucuman.)

d^5—Back uniform or with narrow yellow shaft stripes.

d^6—Back with hair-like yellow shaft stripes or elongated narrow spots; pale barring on underparts well marked.

1—Bars on chest broken into wide arrow-shaped spots; wing about 85..... *V. agilis.*
(Eastern Peru, eastern Ecuador, eastern Colombia and northwestern Brazil.)

2—Bars on chest complete; wing about 81..... ..... *V. passerinus.*
(Guiana, eastern Venezuela, northern and northeastern Brazil.)

e^6—Back (always?) uniform; pale barring on underparts somewhat obscure and very narrow.

1—Red on head confined to occiput and nape (male); no red on head or nape (female); wing about 91 ..... *V. olivinus.*
(Brazil, Bolivia, Paraguay and Argentina.)

d^4—Chest spotted or streaked (not barred); belly barred.

e^5—Back with narrow yellow shaft streaks (sometimes obscure.)

1—Chest with longitudinal spots of whitish; dark markings on underparts more olive; wing about 81..... ..... *V. fidelis.*
(Colombia.)

2—Chest with wide, somewhat arrow shaped spots or broken bars; general color of underparts more dusky; wing about 85..... *V. agilis.*
(Eastern Peru, eastern Ecuador, eastern Colombia and northwestern Brazil.)

f^5—Back conspicuously barred.

1—Back strongly barred with yellowish; underparts spotted with yellowish white or whitish bars on belly irregular; wing about 94..... *V. spilogaster.*
(Southern Brazil, Uruguay and Argentina.)

c^1—With yellow nuchal band present (often more or less obscured by red in the male but distinct in the female).

c^2—Back or wings washed with more or less red.

1—Back strongly washed with red; wing coverts spotted with large pinkish white spots; wing about 92 mm..... *V. ruficeps ruficeps.*
(Middle and lower Amazon region, Brazil.)

2—Red wash on back faint; upper wing coverts tipped with red; spots on wing coverts obscure or absent; neck washed with fulvous; a white line under the eye; wing about 93 mm..... *V. ruficeps hæmatostygma.*
(Ecuador, Peru, Bolivia and western Brazil.)

3—No fulvous on neck; no white line under eye; red tips to upper wing coverts much reduced or absent; wing about 94..... *V. orinocensis*
(Orinoco region, Venezuela.)

4—Red wash faintly indicated; wing coverts with buffy spots; central tail feathers transversely spotted and lateral tail feathers barred; wing about 93 mm..... *V. affinis.*
(Eastern and southeastern Brazil, Goyaz to Rio de Janeiro and perhaps farther north.)

d^2—No red wash on back or wings.

1—Upper parts and outer webs more or less spotted (not uniform); wing about 90..... *V. maculifrons.*
(Southern Brazil.)

2—Upper parts and outer webs of quills uniform (not spotted)..... *V. cassini*
(Guiana, eastern Venezuela and northeastern Brazil.)

***Veniliornis oleaginus oleaginus** (*Lichtenstein*). OLEAGINUS WOODPECKER.

Picus oleaginus LICHTENSTEIN, Preis-Verz. Mex. Thierw., 1830, p. 1 (Mexico). *Id.*, Journ. für Ornith., 1863, p. 55 (reprint).
Dendrobates oleaginus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 344, part.
Chloronerpes oleaginus SCLATER, Proc. Zool. Soc. Lond., 1856, p. 307.
Mesopicus oleaginus MALHERBE, Mon. Picidæ, II, 1862, p. 53; IV, 1862, pl. 57, figs. 6-7.
Veniliornis oleaginus oleaginus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 188.

Range: Eastern Mexico in states in Vera Cruz (Jalapa, Vera Cruz, Cordova, Orizaba, etc.), San Luis Potosí, Puebla and Mexico (near city of Mexico, etc.).

2: Mexico (Vera Cruz).

***Veniliornis oleaginus sanguinolentus** (*Sclater*). CABOT'S WOODPECKER.

Chloronerpes sanguinolentus SCLATER, Proc. Zool. Soc. Lond., 1859, p. 60, pl. 151 (Omoa, Honduras).

Mesopicus sanguinolentus MALHERBE, Mon. Picidæ, II, 1862, p. 76; III, 1862, pl. 43, fig. 6.

Dendrobates sanguinolentus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 346.

Chloronerpes caboti SCLATER, Cat. Am. Bds., 1862, p. 337 (Choctum, Guatemala).

Veniliornis caboti DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I, 1907, p. 92.

Veniliornis oleaginus sanguinolentus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 190.

Range: Southeastern Mexico from southern Vera Cruz (Orizaba, etc.) southward in states of Oaxaca, Tabasco, Yucatan and Chiapas and in Guatemala, British Honduras, Honduras, Nicaragua and Costa Rica to western Panama.

6: Mexico (Tizimin, Yucatan) 1; Guatemala (San José) 3; Nicaragua (Matagalpa) 1; Costa Rica (La Estelle de Cartago) 1.

Veniliornis oleaginus aureus *Chapman*.[a] POPAYAN WOODPECKER.

Veniliornis oleaginus aureus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIII, 1914, p. 612 (La Sierra, 6800 ft., central Andes south of Popayan, Colombia); *Id.*, XXXVI, 1917, p. 352 (Salencio; Las Lomitas; San Antonio; Gallera; Popayan; La Sierra; Miraflores; Sta. Elena, Colombia).

Range: Subtropical zone of the western Andes and western slope of the central Andes (and northern portion of eastern Andes?), Colombia, and southward into Ecuador.

1: Venezuela (Paramo de Tama, alt. 7000 ft., south of Cucuta, Colombia, close to the Colombian line).[b]

Veniliornis oleaginus reichenbachi (*Cabanis and Heine*).[c] VENEZUELAN WOODPECKER.

Phœonerpes reichenbachi CABANIS and HEINE, Mus. Hein., IV, 1863, p. 141 (Caracas, Venezuela).

Picus rubidus SUNDEVALL, Consp. Av. Picinæ, 1866, p. 35 (new name for *P. reichenbachi* Cabanis and Heine).

Veniliornis fumigatus fumigatus HELLMAYR and SEILERN, Arch. für Naturg., Abt. A., 5 Heft, 1912, p. 151, part, crit. (Venezuela).

[a] *Veniliornis oleaginus aureus* CHAPMAN: Similar to *V. o. oleaginus*, but back more golden; auricular region paler; wing shorter; bill longer; differs from *V. o. sanguinolentus* in being larger and in having wings and coverts less washed with golden; white spots on quills larger; the second outer primary with three instead of two spots, the short outer primary usually with trace of white.

[b] A female taken at Paramo de Tama, Venezuela (close to the Colombian line, south of Cucuta, Colombia) approaches nearest to *aureus* (compared with the type) than with any other known form belonging to the group. Wing, 98; bill, 19.

[c] Size smaller, wing about 94; color differences (red on back, etc.) apparently not constant.

(?) *Veniliornis oleaginus exiquus* TODD, Proc. Biol. Soc. Wash., XXIX, 1916, p. 97 (La Cumbre de Valencia, Venezuela).

Range: Venezuela.

***Veniliornis oleaginus fumigatus** (*Lafresnaye and D'Orbigny*). SMOKE-COLORED WOODPECKER.

Picus fumigatus LAFRESNAYE and D'ORBIGNY, Voy. Am. Mérid., Ois, 1839, p. 380, pl. LXV, fig. 1 (Chiquitos, Bolivia).

Dendrobates fumigatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 342, part.

Chloronerpes fumigatus BONAPARTE, Consp. Av., I, 1850, p. 118; GOODFELLOW, Ibis, 1902, p. 209 (west of Pichincha, Ecuador); TACZANOWSKI, Orn. Pérou, III, 1886, p. 79.

Mesopicus fumigatus MALHERBE, Mon. Picidæ, II, 1862, p. 54, pl. 57, figs. 3-4.

Veniliornis oleaginus fumigatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 187 (in key), part; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 351 (La Candela; near San Agustin; near Fusugasuga; Palo Hueco (near Pacho); Buena Vista, eastern Andes, Colombia).

Veniliornis fumigatus DABBENE, Bol. Soc. Physis, I, 1914, p. 324, crit. (Argentina?).

Range: Mountains of Colombia (eastern Andes) and southward in Ecuador, Peru, Bolivia and northern Argentina?[a]; Venezuela?[b]

2: Peru (Hda. Limón, near Balsas).

Veniliornis callonotus callonotus (*Waterhouse*). WATERHOUSE'S WOODPECKER.

Picus callonotus WATERHOUSE, Proc. Zool. Soc. Lond., 1840, p. 182 (Guayaquil), DES MURS, Iconogr. Orn., X, 1849, p. 4, pl. LIX; MALHERBE, Mon. Picidæ; I, 1861, p. 129; III, 1861, pl. XXX, figs. 1-2.

Dendrobates callonotus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 346 (Guayaquil and Babahoyo, Ecuador; Puna Island).

[*Veniliornis*] *callonotus* BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 173, No. 1716.

Range: Ecuador.

Veniliornis callonotus major (*Berlepsch and Taczanowski*). TUMBEZ WOODPECKER.

Chloronerpes callonotus major BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1883, p. 570 (Tumbez, northern Peru).

Chloronerpes callonotus peruvianus TACZANOWSKI, Orn. Pérou, III, 1886, p. 80 (Tumbez, etc.).

Dendrobates peruvianus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 348 (northern Peru).

Range: Northern Peru.

[a] *Cf.* Dabbene, *l. c.*

[b] *Cf.* Hellmayr and Seilern, Arch. für Naturg., Abt. A, 5 Heft, 1912, p. 151, in text.

***Veniliornis sanguineus** (*Lichtenstein*). BLOOD-COLORED WOODPECKER.

Picus sanguineus LICHTENSTEIN, Cat. Rer. Hamb., 1793, p. 17 (Guiana).
Picus rubescens VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 90.
Mesopicus sanguineus MALHERBE, Mon. Picidæ, II, 1862, p. 74, pl. LX, figs. 4-5.
Venelia albertuli BONAPARTE, Consp. Gen. Av., I, 1850, p. 129.
Dendrobates sanguineus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 348.
Veniliornis sanguineus BERLEPSCH, Nov. Zool., XV, 1908, p. 271; CHUBB, Bds. Brit. Guiana, I, 1916, p. 487 (Guiana and Venezuela); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 57 (Paramaribo, Surinam).

Range: The Guianas and "Venezuela."[a]

2: Surinam (near Paramaribo 1, Little Wanica 1).

Veniliornis nigriceps nigriceps (*Lafresnaye and D'Orbigny*). BLACK-HEADED WOODPECKER.[b]

Picus nigriceps LAFRESNAYE and D'ORBIGNY, Voy. Amer. Mérid., IV, 1835-44, p. 380, pl. LXV, fig. 2, female (Ayupaya).
Mesopicus nigriceps MALHERBE, Mon. Picidæ II, 1862, p. 68, pl. LIX, figs. 1-2.
Campias malherbei CABANIS and HEINE, Mus. Hein., IV, 1863, p. 155, part.
Chloronerpes nigriceps GRAY, List Picidæ, Brit. Mus., 1868, p. 111, part.
Dendrobates nigriceps HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 350, part (Peru and Bolivia).

Range: Bolivia and Peru.

Veniliornis nigriceps pectoralis (*Berlepsch and Stolzmann*).[c] PECTORAL WOODPECKER.

Dendrobates malherbei pectoralis BERLEPSCH and STOLZMANN, Proc. Zool. Soc. Lond., 1902, p. 33 (Maraynioc, central Peru, alt. 13000 ft.).

Range: Andes of Central Peru.

Veniliornis nigriceps equifasciatus *Chapman*.[d] COLOMBIAN BANDED-TAILED WOODPECKER.

Veniliornis nigriceps equifasciatus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXI, 1912, p. 144 (Santa Isabel, central Andes, Colombia); *Id.*, XXXVI, 1917, p. 352 (Santa Isabel; Almaguer, central Andes, Colombia).
(?) *Chloronerpes malherbii*[e] SCLATER, Cat. Am. Bds., 1862, p. 338, localities only: (Matos and Rio Napo, Ecuador).

[a] *Cf.* Chubb, *l. c.*

[b] Name from the female, which has the entire top of the head deep black.

[c] *Veniliornis nigriceps pectoralis* (BERLEPSCH and STOLZMANN): The type (a female) is described as differing from *V. n. nigriceps* from Bolivia in the dusky olive crown (not black); shorter wings and less regular banding of the underparts (no specimens seen by me).

[d] *Veniliornis nigriceps equifasciatus* CHAPMAN: Similar to *V. n. nigriceps*, but olive green and yellowish bars on under parts of equal width.

[e] New name proposed for *Picus nigriceps* Lafresnaye and D'Orbigny.

Range: Temperate zone of central Andes, Colombia and northern Ecuador.[a]

***Veniliornis dignus** (*Sclater and Salvin*). YELLOW-VENTED WOODPECKER.

Chloronerpes dignus SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1877, p. 20, pl. 1 (Remedios, Antioquia, Colombia); *Id.*, 1879, p. 533 (Jerico); (?) GOODFELLOW, Ibis, 1902, p. 209 (Baeza, Ecuador).

Dryobates dignus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 351 (Antioquia).

Veniliornis dignus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 352 (San Antonio; Cerro Munchique; Salento; Fusugasuga, Colombia).

Range: Colombia; eastern Ecuador?

1: "Colombia."

Veniliornis valdizani (*Berlepsch and Stolzmann*).[b] VALDIZAN'S WOODPECKER.

Dendrobates valdizani BERLEPSCH and STOLZMAN, Ibis, 1894, p. 401 (Huacras, Vitoc, central Peru, alt. 7000 ft.); *Id.*, Proc. Zool. Soc. Lond., 1902, p. 33 (Lluacras, Vitoc).

[*Veniliornis*] *valdizani* BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 173.

Range: Central Peru.

***Veniliornis passerinus** (*Linnæus*). PASSERINE WOODPECKER.

Picus passerinus LINNÆUS, Syst. Nat., I, ed. 12, 1766, p. 174 ("ex Dominica," *errore* = Cayenne)[c].

Picus senegalensis GMELIN, Syst. Nat., I, 1788, p. 430 ("Senegal" = Cayenne).

Picus tephrodops WAGLER, Syst. Av. Picus, 1827, sp. 48 (based on *Picus senegalensis* GMELIN, *ex* Buffon and Daubenton, Pl. Enl., 345, fig. 2).

Picus striolatus LESSON, Traité d'Orn., I, 1831, p. 226.

Mesopicus passerinus MALHERBE, Mon. Picidae, II, 1862, p. 59, pl. XLII, figs.4-5.

Chloronerpes tephrodops SCLATER, Cat. Am. Bds., 1862, p. 337.

Dendrobates tephrodops HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 352.

Veniliornis passerinus BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 93 (Altagracia and Caicara, Orinoco Region, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 271 (Cayenne); SNETHLAGE, Bol. Mus. Goeldi, 1914, p. 248 (Mexiana I.; Amape; Monte Alegre; Rio Maecuru; Obidos, Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 488; CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull. II, No. 6, 1916, p. 307 (Common from Ciudad Bolivar to Caicara and beyond to mouth of the Meta).

[a] CHAPMAN (*l. c.*) states that a specimen from Mt. Pichincha, northern Ecuador, while not typical, may be referred to *equifasciatus*.

[b] *Veniliornis valdizani* (BERLEPSCH and STOLZMANN): Similar to *V. dignus*, but differs in having wing coverts with large spots of yellowish olive bordered apically with red; upper tail coverts nearly uniform in coloration; breast and lower throat washed with yellowish olive (instead of whitish green); bill smaller. I have not seen an example of this bird.

[c] As substituted by Berlepsch and Hartert *l. c.*, p. 93, footnote.

Range: Guiana, eastern Venezuela, northern and northeastern Brazil.

6: Brazil (Boa Vista, Rio Branco, Amazonas).

***Veniliornis tænionotus tænionotus** (*Reichenbach*). BANDED-EARED WOODPECKER.

Chloronerpes tænionotus REICHENBACH, Scans. Picinæ, 1854, p. 354, pl. DCXXV, figs. 4164, 4165 (Brazil).[a]

Mesopicus tænionotus MALHERBE, Mon. Picidæ, II, 1862, p. 58.

Campias tænionotus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 149.

Dendrobates tænionotus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 353 (Bahia to Pernambuco).

Veniliornis tænionotus BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 173 (eastern Brazil).

Range: Eastern Brazil, Minas Geraes and Bahia to Pernambuco.[b]

5: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraes 1; Macaco Secco, near Andarahy, Bahia 4).

***Veniliornis tænionotus cearæ** *Cory*.[c] CEARÁ BANDED-EARED WOODPECKER.

Veniliornis tænionotus cearæ CORY, Field Mus. Nat. Hist., Orn. Ser., 1, 1915, p. 306 (Serra Baturite, Ceará, Brazil).

(?) *Veniliornis tænionotus* SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 249 (Marajo; Pindobal; Rio Arary; Monte Alegre; Piauhy; Amarracão).

Range: Northeastern Brazil (Ceará).

4: Brazil (Serra Baturite, Ceará 3, including the type; Jua, near Iguatu, Ceará 1).

***Veniliornis agilis** (*Cabanis and Heine*). AGILE WOODPECKER.

Campias agilis CABANIS and HEINE, Mus. Hein., IV, 1863, p. 147 (Rio Napo, Ecuador).

Picus agilis SUNDEVALL, Consp. Av., Picinæ, 1866, p. 40.

Chloronerpes agilis GRAY, List Picidæ British Museum, 1868, p. 110.

Dryobates agilis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 355 (Northeastern Peru, Iquitos; Eastern Ecuador and north to Santa Fé de Bogotá, Colombia).

Veniliornis agilis SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 249 (Rio Purús, Ponte Alegre; Bom Lugar, western Brazil).

Range: Eastern Peru, eastern Ecuador, eastern Colombia and northwestern Brazil (Rio Purús).

3: Peru (Moyobamba).

[a] I designate Prov. of Bahia, eastern Brazil, for the type locality.

[b] I have not seen specimens from Pernambuco.

[c] *Veniliornis tænionotus cearæ* CORY: Similar to *V. t. tænionotus* from Bahia, but upper parts much more golden; the transverse yellow barring on back less distinct; underparts paler, more olivaceous; rump and upper tail coverts strongly tinged with golden yellow (not olive with yellowish markings, as in typical *V. t. tænionotus*); outer tail feather much more strongly banded with yellowish buff. Wing, 87 mm.

Veniliornis fidelis (*Hargitt*). HARGITT'S WOODPECKER.

Dendrobates fidelis HARGITT, Ibis, 1889, p. 59 (Bogotá); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 357, pl. VII.

Veniliornis fidelis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 353 (Buena Vista; Villavicencio, Colombia).

Range: Eastern Colombia.

Veniliornis olivinus (*Malherbe*). OLIVE WOODPECKER.

Picus olivinus MALHERBE, Mem. Soc. Roy. Liége, 1845, p. 67 (Bresil).

Mesopicus olivinus MALHERBE, Mon. Picidæ, II, 1862, p. 65, pl. 59, figs. 4-5.

Picus murinus MALHERBE[a], Mem. Soc. Roy. Liége, 1845, p. 67 (Bresil).

Mesopicus murinus MALHERBE, Mon. Picidae, II, 1862, p. 62, pl. 58, figs. 5,6,7;

Campias murinus PELZELN, Orn. Bras., 1871, p. 246 (Abrantes; Meiaponte. Goyaz; Engenho do Cap. Gama; Matto Grosso).

Campias olivinus PELZELN, Orn. Bras., 1871, p. 246 (Goyaz).

Dendrobates olivinus ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 130 (Chapada, Matto Grosso); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 356.

Veniliornis olivinus HELLMAYR, Nov. Zool., XV, 1908, p. 81 (Goyaz; Rio Araguaya; Cuyabá; Engenho do Gama, Brazil); CHUBB, Ibis, 1910, p. 281 (Sapucay, Paraguay); GRANT, Ibis, 1911, p. 323 (northern Argentina, Paraguay and Albuquerque, Brazil).

Veniliornis olivinus olivinus HARTERT and VENTURI, Nov. Zool.,XVI, 1909, p. 227 (Mocovi, Chaco, Argentina).

Range: Brazil, Bolivia, Paraguay and Argentina.

1: Brazil (Chapada, Matto Grosso).

Veniliornis frontalis (*Cabanis*). TUCUMAN WOODPECKER.

Campias frontalis CABANIS, Journ. für Ornith., 1883, p. 110 (Tucuman, Argentina).

Chloronerpes frontalis SCLATER and HUDSON, Argentine Orn., II, 1889, p. 20 (Tucuman).

Dendrobates frontalis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 354 (Tucuman).

Veniliornis olivinus frontalis HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 227 (Rio Secco, Prov. de Salta; Rio San Francisco, Prov. de Jujay; Tucuman, Argentina).

Range: Northern Argentina (Tucuman).

***Veniliornis spilogaster** (*Wagler*). WAGLER'S EASTERN WOODPECKER.

Picus spilogaster WAGLER, Syst. Av., *Picus*, 1827, p. 33 (Brazil).

(?) *Picus squamosus* VIEILLOT, Nouv. Dict. d'Hist., Nat. XXVI, 1818, p. 74.

Mesopicus spilogaster MALHERBE, Mon. Picidæ, II, 1862, p. 62 (*ex* Wagler).

Mesopicus adspersus MALHERBE, Mon. Picidæ, II, 1862, p. 64, pl. LX, figs. 7-8.

Campias spilogaster PELZELN, Orn. Bras., 1870, p. 247 (southern Brazil); CABANIS and HEINE, Mus. Hein., IV, 1863, p. 156 (Montevideo).

[a] *Cf.* Hellmayr, Nov. Zool., XVI, 1908, p. 81, crit. (immature male of *V. olivinus*).

Dendrobates spilogaster HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 358 (Ypanema; Pelotas, Rio Grande do Sol; San Javier, Missiones, Argentina).

Veniliornis spilogaster CHUBB, Ibis, 1910, p. 281 (Sapucay, Paraguay); OBERHOLSER, Proc. U. S. Nat. Mus., XXV, 1902, p. 128 (Sapucay).

Range: Southern Brazil, Paraguay, Uruguay and northern Argentina.

1: Brazil (Victoria, São Paulo).

Veniliornis maculifrons (*Spix*). BANDED WOODPECKER.

Picus maculifrons SPIX, Av. Bras., I, 1824, p. 62, part (male), pl. LVI, fig. 1 ("in sylvis Rio de Janeiro").

Chloronerpes affinis (*nec* Swainson) SCLATER, Cat. Am. Bds., 1862, p. 337; (?) SCLATER and HUDSON, Argentine Orn., II, 1889, p. 20.

Picus albipes SUNDEVALL, Consp. Av., Picinæ, 1866, p. 37.

Campias maculifrons PELZELN, Orn. Bras., 1871, p. 245 (Rio de Janeiro).

Dendrobates maculifrons HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 359 (Brazil).

Veniliornis maculifrons HELLMAYR, Abh. K. Bayer Akad. Wiss., XXII, 1906, p. 608 (Rio de Janeiro).

Range: Eastern and southern Brazil.[a]

Veniliornis cassini (*Malherbe*). CASSIN'S WOODPECKER.

Mesopicus cassini MALHERBE, Mon. Picidæ, II, 1862, p. 55; III, 1862, pl. LVIII, figs. 2-3 (Bresil? = Cayenne)[b].

Campias sedulus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 149.

Chloronerpes sedulus GRAY, List. Picidæ British Museum, 1868, p. 109.

Dendrobates cassini HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 360 (British Guiana and Cayenne).

Veniliornis cassini BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 93 (Suapure and La Pricion, Caura River, Venezuela); BERLEPSCH, Nov. Zool., XV, 1908, p. 272 (Iponsin, Cayenne); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 249 (Rio Jary; Monte Alegre; Obidos; Rio Jamunda, Brazil); CHUBB, Bds. Brit. Guiana, I, 1916, p. 488; BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 57 (Paramaribo, Surinam).

Range: Guianas, eastern Venezuela and northeastern Brazil.

Veniliornis ruficeps ruficeps (*Spix*). SPIX'S RUFOUS-HEADED WOODPECKER.

Picus ruficeps SPIX, Av. Bras., I, 1824, p. 63, pl. LVI, figs. 2-3 ("in sylvis fluminis Amazonum").

Dendrobates ruficeps HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 361 (Pará; Rio Tocantins; Pernambuco).

Veniliornis ruficeps SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 249 (Pará; Rio Iriri; Rio Tapajoz, etc.).

[a] The range of this species is not definitely known. Hargitt (*l. c.*) gives Bahia as the habitat. Sclater and Hudson's record for Salta, Argentina, was based on White's identification and as stated by the authors requires further confirmation.

[b] Type locality designated by Berlepsch and Hartert (*l. c.*).

Veniliornis ruficeps ruficeps HELLMAYR, Nov. Zool., XIV, 1907, p. 25 (Itaituba); *Id.*, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 611 (Pará; Rio Tocantins; Borba; Rio Madeira; Marabitanas; Rio Negro); *Id.*, XVII, 1910, p. 383 (Borba, Rio Madeira); *Id.*, Abh. K. Bayer, Akad. Wiss., Munchen, XXVI, 2, 1912, p. 94 (Pará District).

Range: Northern and northeastern Brazil (middle and Lower Amazon Region).

***Veniliornis ruficeps hæmatostygma** (*Malherbe*). CRIMSON-BANDED WOODPECKER.

Mesopicus hæmatostygma MALHERBE, Mon. Picidæ, II, 1862, p. 72, pl. LXI, figs. 2-5 (Pérou") (Engenho do Gama)[a].

Campias hilaris CABANIS and HEINE, Mus. Hein., IV, 1863, p. 154.

Dendrobates hæmatostigma HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 364 (Rio Napo and Sarayacu, Ecuador; Yquitos; Chamicuros and Xeberos, eastern Peru).

Veniliornis ruficeps hæmatostigma HELLMAYR, Nov. Zool., XIV, 1907, p. 379 (Humaytha, Rio Madeira); *Id.*, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 611 (localities in Matto Grosso and Rio Madeira region, Brazil; central and eastern Peru, and northern Bolivia); *Id.*, XVII, 1910, p. 388 (Calama; Maruins, Rio Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 250 (Bom Lugar, Rio Purús, Brazil); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 353 (La Morelia, Colombia); VON IHERING, Aves do Brazil, I, 1907, p. 184 (Rio Jurua).

Range: Eastern Peru, northern Bolivia, Ecuador, southeastern Colombia and upper Amazonian and Rio Madeira region, Brazil.

1: Peru (Chunchamayo).

Veniliornis orinocensis *Berlepsch and Hartert*.[b] ORINOCO WOODPECKER.

Veniliornis orinocensis BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 93 (Angostura and Munduapo, Orinoco Region, Venezuela = Munduapo by designation); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 306, crit. (Upper Orinoco Region, above the falls of Atures; Boca de Sina; Cunucunuma River, Venezuela).

(?) *Mesopicus kirtlandi* MALHERBE, Mon. Picidæ, II, 1862, p. 54, pl. LVIII, fig. 1 (Bresil)[c].

[a] *Cf.* Hellmayr (*l. c.*), 1906.

[b] *Veniliornis orinocensis* BERLEPSCH and HARTERT: Differs from *V. r. hæmatostygma* chiefly in the absence of fulvous yellow color on the neck; absence of the whitish line under the eye and the whitish anteocular spot; ground color of underparts somewhat darker brownish tint; the red spots on the tips of the larger upper wing coverts very small or entirely absent; size somewhat smaller; wing, 93 to 95 mm.

[c] Messrs. Berlepsch and Hartert suggest (*l. c.*) that it is possible *Mesopicus kirtlandi* MALHERBE (which I am unable to identify from the plate or description) may prove to be this species, in which case, of course, Malherbe's name has priority. (See also Berlepsch and Leverkuhn, Ornis, 1890, p. 30, in text). Hargitt's reference

(?) *Dendrobates kirtlandi* HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 349 (Maroni River, Surinam).

(?) *Veniliornis ruficeps kirtlandi* VON IHERING, Aves do Brazil. I, 1907, p. 185.[a]

Range: Upper Orinoco Region, Venezuela.

***Veniliornis affinis** (*Swainson*). GOLDEN-NAPED WOODPECKER.

Picus affinis SWAINSON, Zool. Journ. Ill., II, 1821, pl. 78 (Bahia).

Picus maculifrons SPIX, Av. Bras., I, 1824, p. 62 (part, descr. female only.).[b]

Chloronerpes affinis GRAY, Gen. Bds., II, 1846, p. 443.

Chloronerpes selysii SCLATER, Proc. Zool. Soc. Lond., 1858, p. 74.

Mesopicus selysii MALHERBE, Mon. Picidæ, II, 1862, p. 67; III, 1862, pl. 62.

Campias selysii PELZELN, Orn. Bras., 1871, p. 245 (Bahia).

Dendrobates affinis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 362 (Provinces of Bahia, Rio de Janeiro and Goyaz).

Range: Brazil, from the Rio Madeira region, east and south to Provinces of Bahia, Rio de Janeiro and probably north to the Amazon River.

1: Brazil (Porto Velho, Rio Madeira).

***Veniliornis kirkii kirkii** (*Malherbe*). KIRK'S RED-RUMPED WOODPECKER.

Picus (*Chloropicus*) *kirkii* MALHERBE, Rev. Zool., VIII, 1845, p. 400 (Tobago).

Chrysoptilus kirkii JARDINE, Contr. Orn., 1848, p. 15, pl. 2.

Mesopicus kirkii MALHERBE, Mon. Picidæ, III, 1861, pl. 59, figs. 7, 8.

Dendrobates kirki HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 365, part (Trinidad and Tobago).

Veniliornis kirkii OBERHOLSER, Proc. Acad. Nat. Sci. Phila., 1899, p. 205.

Veniliornis kirkii kirkii HELLMAYR, Nov. Zool., XIII, 1906, p. 39 (Tobago and Trinidad); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 188, in key.

Range: Islands of Tobago and Trinidad.

3: Tobago Island.

***Veniliornis kirkii continentalis** *Hellmayr*. CONTINENTAL WOODPECKER.

Veniliornis kirkii continentalis HELLMAYR, Nov. Zool., XIII, 1906, p. 39 (Caripé, near Cumana, Venezuela); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 188, in key.

Range: Venezuela.

9: Venezuela (Lake Valencia 1; Maracay, Aragua 1; Encontrados, Zulia 6; Colon, Tachira 1).

to the specimen in the British Museum identified as "*kirtlandi*" probably does not belong here as it is extremely doubtful if the bird from the Maroni River, Surinam, would prove to be the same as *orinocensis*, which seems to be restricted to the upper Orinoco Region.

[a] *Cf.*, Hellmayr, Abh. K. Bayer. Akad. Wiss., XXII, 1906, p. 610 (Spix's Types).

[b] *Cf.* Hellmayr, Abh. K. Bayer. Akad. Wiss., XXII, 1916, p. 609 (Spix's Types).

Veniliornis kirkii cecilii (*Malherbe*). CECILIA'S WOODPECKER.

Mesopicos cecilii MALHERBE, Rev. et Mag. de Zool., 1849, p. 538 (Colombia).
Mesopicus cecilii MALHERBE, Mon. Picidæ, II, 1862, p. 71, pl. 60, figs. 1-2.
Dendrobates cecilæ HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 366, part (Bogotá and Antioquia, Colombia).
Veniliornis kirkii cecilii HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1188 (Guineo, Rio Calima, Colombia); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 188, in key; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 353 (Juntas de Tamana; Los Cisneros; Barbacoas; Puerto Valdivia; Rio Frio; Chicoral; Honda; Malena; Boca de Chimi, Colombia).
Chloronerpes ceciliæ GOODFELLOW, Ibis, 1902, p. 209, (Baeza, east Ecuador).

Range: Colombia and eastern Ecuador.

2: Colombia 1; "North Ecuador" 1.

Veniliornis kirkii dariensis *Ridgway*. DARIAN WOODPECKER.

Veniliornis kirkii dariensis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 33 (El Real, Darien, eastern Panama); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 192 (El Real, Darien, and Guayaquil, Ecuador).

Range: Eastern Panama to western Ecuador.

***Veniliornis kirkii neglectus** (*Bangs*). DIVALA WOODPECKER.

Veniliornis neglectus BANGS, Proc. N. E. Zool. Club, II, 1901, p. 99 (Divala, Chiriqui, western Panama); CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 589 (Costa Rica).
Veniliornis kirkii neglectus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 193.

Range: Southwestern Costa Rica to eastern Panama (Cana, Darien, 1800 ft.).

1: Costa Rica (Palmar).

Genus **DYCTIOPICUS** Bonaparte.

Dyctiopicus Bonaparte, Ateneo Italiano, II, 1854, p. 123 (Type as fixed by Gray, 1855, *Picus bicolor* Gmelin=*P. mixtus* Boddaert); Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 11.

Dyctiopicus mixtus mixtus (*Boddaert*). VARIED WOODPECKER.

Picus mixtus BODDAERT, Tabl. Pl. Enl., 1783, p. 47 (Paraguay); SCLATER and Hudson, Argentine Orn., II, 1889, p. 19; MALHERBE, Mon. Picidæ, I, 1861, p. 137; III, 1861, pl. 34, figs. 1-3.
Picus bicolor GMELIN, Syst. Nat., I, 1788, p. 438 (founded on "Pic varie de la Encenada" Buffon, Hist. Nat. Ois., VII, 1783, p. 409; DAUBENTON, Pl. Enl., No. 748, fig. 1).
Picus maculatus VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 91.
Dendrocopus mixtus HARTERT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 259; LÖNNBERG, Ibis, 1903, p. 486, crit. (Colonia Crevaux, Pilcomayo R., Bolivian Chaco).

Dendrocopus mixtus mixtus HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 228 (La Soledad; Barracas al Sud; Ocampo; Tucuman; Rio Bermego; Prov. de Salta, Argentina).

Range: Paraguay, southern Brazil, Uruguay, northern Argentina and Chile.

Dyctiopicus mixtus berlepschi (*Hellmayr*).[a] BERLEPSCH'S VARIED WOODPECKER.

Dryobates mixtus berlepschi HELLMAYR, Verh. Orn. Gesell Bayer, XII, 1915, No. 3, p. 212 (Mangrello, Territory of Neuguen, western Patagonia, Argentina).

Range: Western Argentina (Territory of Neuguen).

Dyctiopicus lignarius (*Molina*). RED-NAPED WOODPECKER.

Picus lignarius MOLINA, Stor. Nat. Chile, 1782, p. 343 (Chile); MALHERBE, Mon. Picidæ, I, 1861, p. 109; III, 1861, pl. 26, figs. 9, 11; TACZANOWSKI, Orn. Pérou, III, 1886, p. 78.

Picus melanocephalus KING, Proc. Zool. Soc. Lond., 1831, p. 14 (female).

Picus puncticeps D'ORBIGNY, Voy. Amer. Mérid., IV, 1835-44, p. 379, pl. 44, fig. 1.

Picus kingii GOULD, in Darwin's Voy. Beagle, Bds., 1841, p. 113.

Picus kaupi HARTLAUB, Rev. et Mag. de Zool., 1852, p. 6.

Picus gradatus LICHTENSTEIN, Nomen. Cl. Av., 1854, p. 75.

Dendrocopus lignarius HARTERT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 257 (Chile; Bolivia; Island of Chiloe; Cosquin; Cordova, Argentina); LANE, Ibis, 1897, p. 48 (Chile); GRANT, Ibis, 1911, p. 322 (near Goya and near Santa Elana, northern Argentina).

Range: Chile, Argentina, Bolivia and southern Peru.

Dyctiopicus cancellatus (*Wagler*). SÃO PAULA WOODPECKER.

Picus cancellatus WAGLER, Isis, 1829, p. 510 ("Mexico"=São Paulo, southern Brazil); PELZELN, Orn. Bras., 1870, p. 443, part (São Paulo and Lagoa Santa).

Picus wagleri MALHERBE, Mon. Picidæ, I, 1861, p. 112; III, 1861, pl. 29, figs. 1, 2, 3.

Dendrocopus cancellatus HARTERT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 260 (Province São Paulo).

Range: Southeastern Brazil.

Genus **DRYOBATES** Boie.

Dryobates Boie, Isis, XXI, 1826, p. 977 (Type *Picus pubescens* Linnæus).

[a] *Dyctiopicus mixtus berlepschi* (HELLMAYR): Similar to *D. mixtus mixtus* (BODDAERT), but differs in having the bill longer; the hair-like whitish streaks on top of head more inconspicuous and chiefly confined to the front and sides of the crown; the dark brown ear spot is larger; ground color of underparts white (without trace of yellowish rusty). Bill, 22½–24 mm.

***Dryobates villosus villosus** (*Linnæus*). HAIRY WOODPECKER.

Picus villosus LINNÆUS, Syst. Nat., ed. 12, I, 1766, p. 175 (New Jersey); AUDUBON, Orn. Biog., V, 1839, p. 164, pl. 16; *Id.*, Bds. Am., oct. ed., 1842, p. 244, pl. 262; MALHERBE, Mon. Picidæ, I, 1861, p. 75; III, 1863, pl. 21, figs. 1-2; BAIRD, BREWER and RIDGWAY, Hist. N. A. Bds., II, 1874, pl. 49, figs. 3, 4, 5.

Picus leucomelas BODDAERT, Tabl. Pl. Enl., 1873, p. 21.

Picus canadensis GMELIN, Syst. Nat., I, 1788, p. 437.

Picus martini AUDUBON, Bds. Am., 1838, pl. 417, figs. 1-2 (Toronto, Canada).

Picus phillipsii AUDUBON, Orn. Biog., V, 1839, p. 186, pl. 417, figs. 5-6 (Massachusetts).

Picus villosus var. *medius* BAIRD, Rep. Pacific R. R. Survey, 1858, p. 84.

Dendrocopus villosus, typical, HARGITT Cat. Bds. Brit. Mus., XVIII, 1890, p. 230.

Dryobates villosus villosus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 201.

Range: Middle districts of eastern United States and adjacent portions of Canada, New Brunswick, Nova Scotia, southern Ontario, Michigan, Minnesota, Wisconsin, etc., south to Maryland, Virginia and higher parts of North and South Carolina, Tennessee, etc.; west to Indiana, Illinois and Missouri to northwestern Texas, eastern border of the Great Plains. Intergrading with *D. v. septentrionalis* in the north and southward with *D. v. audubonii*.

†40: Maine (Upton 2, "Maine" 2); Ohio (Garrettsville) 1; Michigan (Kalamazoo) 1; Wisconsin (Solon Springs 3, Woodruff 1, Lake Geneva 1, Saynor 2, Beaver Dam 8); Illinois (Grand Chain 3, Mound City 3, Lake Forest 1, Worth 1, McHenry 1, Joliet 3); Indiana (Bluffton) 2; Iowa (Knoxville 4, Delaware City 1).

***Dryobates villosus audubonii** (*Swainson*). SOUTHERN HAIRY WOODPECKER.

Picus audubonii SWAINSON, Fauna Bor-Am., 1831, p. 306, figs. 5, 6, 7 (Georgia).

Picus auduboni TRUDEAU, Journ. Acad. Nat. Sci. Phila., VII, 1837, p. 404.

Dryobates villosus audubonii RIDGWAY, Proc. U. S. Nat. Mus., VIII, 1855, p. 355; *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 206.

Dryobates villosus auduboni, Am. Orn. Union Check List, 1910, p. 186.

Range: Florida and lowlands of Georgia, northward along the coast to Virginia and through lower Mississippi Valley to southeastern Missouri and Lower Wabash Valley and westward along the Gulf coast from Florida to southeastern Texas.

8: North Carolina (Raleigh) 2; Florida (Mary Esther 1, Starke 1, Sanford 1, Punta Rassa 1); southern Illinois (Mound City 1, Grand Chain 1).

***Dryobates villosus maynardi** (*Ridgway*). MAYNARD'S WOODPECKER.

Picus insularis (not of Gould, 1862) MAYNARD, Nat. in Florida, I, No. 4, 1885 (New Providence, I., Bahamas); CORY, Bds. Bahama I., 1880, p. 120.

Dryobates villosus maynardi RIDGWAY, Man. N. Am. Bds., 1887, p. 282 (new name for *Picus insularis* Maynard, preoccupied); CORY, Bds. West Indies, 1886, p. 170, part; OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, pp. 596, 603 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 208.

Range: Islands of New Providence and Andros, Bahamas.

6: Bahamas (Nassau, New Providence Island).

***Dryobates villosus piger** *G. M. Allen*. ALLEN'S WOODPECKER.

Dryobates villosus piger ALLEN, Auk, 1905, p. 124 (Great Bahama Island, Bahamas); OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, pp. 596, 603 (Monogr.); TODD, Ann. Carnegie Museum, VII, 1911, p. 421, crit. (Abaco I.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 209.

Range: Abaco, Little Abaco and Great Bahama Islands, Bahamas.

†24: Abaco I. 17; Great Bahama I. 7.

Dryobates villosus septentrionalis (*Nuttall*). NORTHERN HAIRY WOODPECKER.

Picus septentrionalis NUTTALL, Man. Orn. U. S. and Canada, Land Bds., 2nd ed., 1840, p. 684 ("northern parts of the continent as far as the 63rd parallel, as well as in northern Oregon"); CORY, Naturalist in Magdalena Is., 1878, p. 51.

Dryobates villosus leucomelas, Am. Orn. Union Check List, 3rd ed., 1910, p. 185.

Dryobates villosus septentrionalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 210.

Range: Canadian zone of North America (except on Pacific coast region) from the western Yukon and Kenai Peninsulas eastward; specimens closely approaching this race occur in eastern Montana and northern Maine.

***Dryobates villosus terrænovæ** *Batchelder*. NEWFOUNDLAND HAIRY WOODPECKER.

Dryobates villosus terrænovæ BATCHELDER, Proc. N. E. Zool. Club, IV, 1908, p. 37 (Placentia, Newfoundland); OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 211.

Range: Newfoundland.

4: Newfoundland (Bay St. George).

***Dryobates villosus monticola** *Anthony*. ROCKY MOUNTAIN HAIRY WOODPECKER.

Dryobates villosus montanus (not *Picus montanus*, Ord, 1815, nor Brehm, 1828) Anthony, Auk, 1896, p. 32 (Boulder Co., Colorado).

[*Dryobates villosus*] *monticola* ANTHONY, Auk, 1898, p. 54, in text (to replace *D. v. montanus*, preoccupied).

Dryobates villosus monticola OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 606 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 214.

Range: Rocky mountain region from British Columbia (Vernon, Crater Mt., Lower Frazer Valley, etc.), south to northern New Mexico and eastern Utah, east to eastern Montana, western South Dakota, and western Nebraska, and west to eastern Washington and eastern Utah (Wasatch and Uintah Mts.).

6: Colorado (Ft. Lyon 2, Williams Range 3, Rocky Ford 1).

Dryobates villosus leucothorectis *Oberholser*. WHITE-BREASTED HAIRY WOODPECKER.

Dryobates villosus leucothorectis OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Burley, New Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50 VI, 1914, p. 214; GRINNELL, Condor XX, 1918, p. 86 (White and Panamint mountains in Mono and Inyo Counties, California).

[*Dryobates villosus*] *hyloscopus* (not *D. hyloscopus* Cabanis and Heine) BREWSTER, Auk, 1888, p. 252, in text, part.

Dryobates villosus hyloscopus Am. Orn. Union Check List, 2nd ed., 1895, No. 393 d, part.

Range: Arizona (except northern portion) and from western Texas (Guadeloupe Mts.) to southern Utah and middle New Mexico, and Mts. in Mono and Inyo counties California.

Dryobates villosus orius *Oberholser*. SIERRA HAIRY WOODPECKER.

Dryobates villosus orius OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Quincy, California); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 215.

Range: Sierra Nevada district in California, Oregon, Nevada and south-central Washington; casual to western Washington in winter.

***Dryobates villosus hyloscopus** (*Cabanis and Heine*). CABANIS' HAIRY WOODPECKER.

Dryobates hyloscopus CABANIS and HEINE, Mus. Hein., 1863, p. 69 (San José, California).

Dryobates villosus hyloscopus OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 217.

Range: Coast district of California (from Mendocino Co., southward) and northern Lower California; also interior of southern California from Mariposa Co., southward (Mono Co., etc.).

1: California (Riverside).

***Dryobates villosus harrisi** (*Audubon*). HARRIS' WOODPECKER.

Picus harrisi AUDUBON, Bds. Am. (folio ed.) IV, 1838, pl. 417, figs. 8-9 (near Fort Vancouver, Washington); *Id.*, Orn. Biog., V, 1839, p. 191.

Dryobates villosus harrisii OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Monogr.).

Dryobates villosus harrisi Am. Orn. Union Check List, 3rd ed., 1910, p. 186; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 218.

Range: Humid coast district from Humboldt and Siskiyou Counties northern California, northward in western Oregon and Washington to British Colombia; casual in winter south to Monterey County.

4: Washington (Pugallup 1, "Washington" 1); Oregon (Logan) 2.

Dryobates villosus sitkensis *Swarth*. SITKA HAIRY WOODPECKER.

Dryobates villosus sitkensis SWARTH, Univ. Cal. Pub., Zool., VII, 1911, p. 315 (Etolin Island, Alaska); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 220.

Range: Coast district of southeastern Alaska (Sitka, Prince of Wales Island, Wrangell, etc.).

Dryobates villosus picoideus (*Osgood*). QUEEN CHARLOTTE HAIRY WOODPECKER.

Dryobates picoideus OSGOOD, N. Am. Fauna, No. 21, 1901, p. 44 (Cumshewa Inlet, Queen Charlotte I., British Columbia).

Dryobates villosus picoideus OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597, part (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 220.

Range: Queen Charlotte Islands, British Columbia.

Dryobates villosus icastus *Oberholser*. CHIHUAHUA HAIRY WOODPECKER.

Dryobates villosus icastus OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (El Salto, Durango, Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 221.

Range: Southwestern New Mexico, southern Arizona (Huachuca Mts., Pima and Pinál Counties, etc.) and southward in northwestern Mexico (States of Chihuahua, eastern Sonora, Durango, northeastern Jalisco, Zacatecas and Coahuila).

Dryobates villosus intermedius *Nelson*. INTERMEDIATE HAIRY WOODPECKER.

Dryobates villosus intermedius NELSON, Auk, 1900, p. 259 (Villar, San Luís Potosí, Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 222.

Range: Middle eastern portion of Mexican plateau in states of San Luís Potosí and southwestern Tamaulipas.

Dryobates villosus jardinii (*Malherbe*). JARDINE'S HAIRY WOODPECKER.

Picus (*Leuconotopicus*) *jardinii* MALHERBE, Rev. Zool., 1845, p. 374 (Mexico).[a]
Picus jardinii MALHERBE, Mon. Picidæ, I, 1861, p. 103; III, 1861, pl. 25, figs. 4-5.
Dendrocopus jardinii HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 570 (Rio Frio and Tenango del Valle, Mexico).
Dryobates villosus jardinii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 223; OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (Monogr.).

Range: Highlands of Mexico in states of Vera Cruz, Puebla, Mexico, Morelos, Oaxaca, Guerrero and Jalisco.

***Dryobates villosus sanctorum** (*Nelson*). TODOS SANTOS HAIRY WOODPECKER.

Dryobates sanctorum NELSON, Auk, 1897, p. 50 (Todos Santos, Guatemala).
Dryobates villosus sanctorum DEARBORN, Field Mus. Nat. Hist., Orn. Ser., I. 1907, p. 92 (near Tecpam, Guatemala, 8000 ft.); OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, pp. 597, 619 (Monogr.); RIDGWAY, Bull. U. S, Nat. Mus., No. 50, VI, 1914, p. 225.

Range: Highlands of Chiapas, southern Mexico and Guatemala; Honduras?

2: Guatemala (near Tecpam).

***Dryobates villosus fumeus** *Oberholser*. OCOTAL HAIRY WOODPECKER.

Dryobates villosus fumeus OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, p. 597 (San Rafaél del Norte, Nicaragua); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 226.

Range: Mountains of northern Nicaragua.

4: Nicaragua (San Rafaél del Norte 4).

***Dryobates villosus extimus** (*Bangs*). BOQUETE HAIRY WOODPECKER.

Dendrocopus villosus extimus BANGS, Proc. N. E. Zool. Club, II, 1902, p. 33 (Boquete, Chiriqui, western Panama, alt. 6000 ft.).
Dryobates villosus extimus FERRY, Field Mus. Nat. Hist., Orn. Ser., I, 1910, p. 266 (Coliblanco, Costa Rica); OBERHOLSER, Proc. U. S. Nat. Mus., XL, 1911, pp. 597, 620 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, 1914, p. 227.

Range: Highlands of Costa Rica and western Panama.

8: Costa Rica (Coliblanco 5, Volcan Turrialba 2); Panama (Boquete, Chiriqui) 1.

***Dryobates pubescens pubescens** (*Linnæus*). SOUTHERN DOWNY WOODPECKER.

Picus pubescens LINNÆUS, Syst. Nat., ed. 12, I, 1766, p. 175 (Carolina); MALHERBE, Mon. Picidæ, III, 1861, pl. 29, figs. 8-9.

[a] I suggest State of Vera Cruz for the type locality.

Picus lecontei JONES, Ann. Lyc. Nat. Hist., N. Y., IV, 1848, p. 489, pl. 17 (Liberty County, Georgia; abnormal specimen).

Dendrocopus pubescens HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 238, part (Florida).

Dryobates pubescens pubescens RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 228.

Range: Lower southeastern United States, from Florida, Georgia and South Carolina and westward in the Gulf states to southeastern Texas and casually north to Kansas, southeastern Illinois, Tennessee and Virginia. Intergrades with *D. p. medianus* in the northern edge of its range (eastern Kansas, southeastern Illinois, southwestern Indiana, Tennessee, Virginia and Maryland).

†20: North Carolina (Raleigh) 1; Florida (Orange Co. 2, Punta Rassa 3, West Jupiter 5, Kissimmee R. 1, Lake Worth 1, Pine Island 1, "Florida" 1); Louisiana (Buras 3); Mississippi (Vicksburg 2).

***Dryobates pubescens medianus** (*Swainson*). DOWNY WOODPECKER.

Picus (*Dendrocopus*) *medianus* SWAINSON, Fauna Bor.-Am., II, 1831, p. 308 (New Jersey).

Dryobates pubescens medianus BREWSTER Auk, 1897, p. 82, in text; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 233.

Picus pubescens (not of Linnæus) BAIRD, BREWER and RIDGWAY, Hist. Nat. N. Am. Bds., II, 1874, p. 509, part (Kodiak, Alaska); NELSON, Rep. Nat. Hist. Coll. Alaska, 1887, p. 156, part (Kodiak).

Range: Eastern North America from south eastern Virginia, highlands of North and South Carolina, northern Georgia, eastern Tennessee, southern Illinois and Indiana, eastern Kansas, etc., northward to about the northern border of eastern United States and maratime provinces of Canada and eastern Quebec, New Brunswick and Nova Scotia, Prince Edward Island, etc., and westward to eastern border of the Great Plains and casually to Colorado (Denver); also occurs locally on Kodiak Island, Alaska.[a]

†74: New York (Bonnville 1); Massachusetts (Riverside 2, Natic 2); Connecticut (Hartford 5); Maine (Upton 2, "Maine" 2); Prince Edward Island 1; Ohio (Garrettsville 1; Columbus 2); Indiana (Bluffton 2); Illinois (Fox Lake 3, Grand Chain 7, Mound City 6, Olive Branch 5, Henry 3, Joliet 1, Lake Forest 1, Waukegan 1, Cairo 1, Worth 1, Beach 1, Addison 1, Lewiston 1, Chicago 1); Wisconsin (Beaver Dam 13); Iowa (Knoxville 6, Waterloo 1, Kingsville 1).

[a] *Cf.* Ridgway, *l. c.*, 1914 (footnote). Specimens from Kodiak, Alaska are apparently indistinguishable from typical *D. p. medianus*.

Dryobates pubescens microleucus[a] *Oberholser.* NEWFOUNDLAND DOWNY WOODPECKER.

Dryobates pubescens microleucus OBERHOLSER, Proc. Biol. Soc. Wash., XXVII, 1914, p. 43 (Fox Island River, Newfoundland).

Range: Island of Newfoundland.

***Dryobates pubescens nelsoni** *Oberholser.* NORTHERN DOWNY WOODPECKER.

Dryobates pubescens nelsoni OBERHOLSER, Proc. U. S. Nat. Mus., XVIII, 1896, p. 549 (Nulato, Alaska); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 235.

Range: Northern North America in British America, east of the Rocky Mountains and north to Mackenzie and Yukon and thence west to west coast of Alaska. In winter south in Athabasca, Alberta, Manitoba, etc., to the northern United States in eastern Montana, eastern Wyoming, Minnesota, Wisconsin (Kenosha); accidental? in northern New York.

2: Prince Albert, Saskatchewan 1, Okonogon, B. C. 1.

***Dryobates pubescens homorus** (*Cabanis and Heine*). BATCHELDER'S DOWNY WOODPECKER.

Dryobates homorus CABANIS and HEINE, Mus. Hein., IV, heft 2, 1863, p. 65 (California).

Dryobates pubescens oreœcus BATCHELDER, Auk, 1889, p. 253 (Las Vegas, Hot Springs, New Mexico).

Dryobates pubescens homorus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 236.

Range: Rocky Mountain district from British Colombia to New Mexico and Arizona, and in mountains west to middle Washington and eastern California; casual during migrations west to eastern California, east to eastern Montana, western Nebraska, etc.

3: Washington (Prescott) 1; Colorado (Ft. Lyon) 2.

Dryobates pubescens glacialis *Grinnell.* VALDEZ DOWNY WOODPECKER.

Dryobates pubescens glacialis GRINNELL (J), Univ. Cal. Pub., Zool., V, No. 12, 1910, p. 390 (Valdez Narrows, Prince William Sound, Alaska); SWARTH, Univ. Cal. Pub., Zool., VII, 1911, p. 68, crit. (Taku R., Alaska); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 239.

Range: Kenai Peninsula and shores and islands of Prince William

[a] *Dryobates pubescens microleucus* OBERHOLSER: Similar to *D. p. medianus*, but tail shorter, superior wing coverts with fewer and smaller white spots; wing quills with smaller white spots; lower surface usually more smoky brownish; and white dorsal stripe often with black spots or short streaks. Male: average wing, 93.8; tail, 60.7; exposed culmen, 15.1 mm.

Sound and coast of Alaska to Taku River and possibly to northern British Colombia (Ft. Babine).[a]

***Dryobates pubescens turati** (*Malherbe*). WILLOW DOWNY WOODPECKER.

Picus turati MALHERBE, Mon. Picidæ, I, 1861, p. 125; III, 1861, pl. 29, figs. 5, 6, 7 (near Monterey, California).

Dryobates pubescens turati FISHER, Condor, IV, 1902, p. 68, crit.; GRINNELL, Pacific Coast Avifauna, No. 3, 1902, p. 37, range, crit.; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 239.

Range: California (except northwest coast region and southeastern desert mountains).

8: California (San Geronimo 1, Paicines 1, Nicasio 2; Battle Creek 1, Long Beach 1, Mt. Diablo 1, Gilroy 1).

***Dryobates pubescens gairdnerii** (*Audubon*). GAIRDNER'S DOWNY WOODPECKER.

Picus gairdnerii AUDUBON, Orn. Biog., V, 1839, p. 317 (near Fort Vancouver, Washington).[b]

Dryobates pubescens fumidus MAYNARD, Ornith. and Ool., XIV, No. 4, 1889, p. 58 (So. Vancouver Id., British Columbia).

Dryobates pubescens gairdnerii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 241.

Range: Northwest coast region, from southern British Columbia, southward through western parts of Washington and Oregon to Siskiyon Co., and casually in winter to Marin Co., California.

1: Oregon (Tillawoak).

***Dryobates nuttallii** (*Gambel*). NUTTALL'S WOODPECKER.

Picus nuttallii GAMBEL, Proc. Acad. Nat. Sci. Phila., I, 1843, p. 259 (Los Angeles Co., California).

Picus nuttalli MALHERBE, Mon. Picidæ, I, 1861, p. 100; III, 1861, pl. 24, figs. 8-9; BAIRD, BREWER and RIDGWAY, No. Am. Bds., II, 1874, p. 521, pl. 50, figs. 3-6.

Dendrocopus nuttalli HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 244 (California and Oregon).

Dryobates nuttalii RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 242.

Range: Southwestern Oregon and through California to northwestern Lower California (San Pedro Martir Mts., etc.).

10: California (Long Beach 2, Riverside 2, Catadi 1, Battle Creek 3, Pasadena 1, Los Angeles 1).

[a] *Cf.* Ridgway, *l. c.*, p. 239, footnote.

[b] *Cf.* Ridgway, *l. c.*, p. 241.

***Dryobates scalaris scalaris** (*Wagler*). ORIZABA WOODPECKER.

Picus scalaris WAGLER, Isis, 1829, p. 511 (Mexico).[a]

Picus orizabæ CASSIN, Proc. Acad. Nat. Sci. Phila., 1863, p. 196 (Orizaba, Vera Cruz).

Dendrocopus scalaris HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 246, part.

Dryobates scalaris scalaris OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140-141 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 245.

Range: Southern Tamaulipas (Tampico, Altima, etc.), southern San Luís Potosí (Valles) and southward in northern and middle Vera Cruz to Cordova, Jalapa, etc.

3: Tamaulipas 1, Vera Cruz 1, Tampico 1.

Dryobates scalaris ridgwayi *Oberholser*. TLALCOTALPAM WOODPECKER.

Dryobates scalaris ridgwayi OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, p. 140 (Jaltipan, southern Vera Cruz, Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 247.

Range: Coast district of southeastern Vera Cruz (Jaltipan, etc.).

Dryobates scalaris percus *Oberholser*. COMITAN WOODPECKER.

Dryobates scalaris percus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 144 (Comitan, Chiapas, southern Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 248.

Range: State of Chiapas, southern Mexico.

***Dryobates scalaris parvus** (*Cabot*). SISAL WOODPECKER.

Picus parvus CABOT, Journ. Acad. Nat. Sci. Phila., V, 1845, p. 90 (Ticul, Yucatan).

Dryobates scalaris parvus STONE, Proc. Acad. Nat. Sci. Phila., 1890, p. 206; (Tunkas and Tekanto, Yucatan); OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 141; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 248; BANGS, Auk, 1915, p. 168 (Cabot's types).

Picus vagatus CASSIN, Proc. Acad. Nat. Sci. Phila., 1863, p. 196 (Mexico?).

Range: Yucatan and Cozumel Island.

2: Yucatan.

Dryobates scalaris leucoptilurus *Oberholser*. PECK'S WOODPECKER.

Dryobates scalaris leucoptilurus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 141, 146 (Pine Ridge, near Manatee Lagoon, British Honduras); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 249.

Range: British Honduras.

[a] I designate northern Vera Cruz for the type locality as suggested by Ridgway, *l. c.*, p. 247, footnote.

Dryobates scalaris sinaloensis *Ridgway*. MAZATLAN WOODPECKER.

Dryobates scalaris sinaloensis RIDGWAY, Man. N. Am. Bds., 1887, p. 285 (Mazatlan, Sinaloa, Mexico); OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 149 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 250.

Range: State of Sinaloa, western Mexico.

Dryobates scalaris graysoni (*Baird*). TRES MARIAS WOODPECKER.

[*Picus scalaris*] var. *graysoni* BAIRD, in Baird, Brewer and Ridgway's Hist. No. Am. Bds., II, 1874, pp. 501, 517, part (type from Tres Marias Islands, western Mexico).

Dryobates scalaris graysoni NELSON, No. Am. Fauna, No. 14, 1899, p. 43 (Tres Marias Island); OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 141, 148 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 250.

Subsp. *B. Dendrocopus graysoni* HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 250.

Range: Tres Marias Islands, off western Mexico.

***Dryobates scalaris azelus** *Oberholser*. MICHOACAN WOODPECKER.

Dryobates scalaris azelus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 141-147 (La Salada, Michoacan, southwestern Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 251.

Range: States of Michoacan, Oaxaca, Guerrero and Puebla[a], southern Mexico.

1: Mexico (Iguale, Guerrero).

Dryobates scalaris agnus *Oberholser*. CAMOA WOODPECKER.

Dryobates scalaris agnus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 150 (Camoa, Rio Mayo, Sonora, western Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 252.

Range: Southern Sonora, Mexico.

***Dryobates scalaris lucasanus** (*Xantus*). SAN LUCAS WOODPECKER.

Picus lucasanus XANTUS, Proc. Acad. Nat. Sci. Phila., 1859, p. 298 (Cape San Lucas, Lower California); MALHERBE, Mon. Picidæ, I, 1861, p. 166; ELLIOT, Illust. New & Unfig. Bds. N. Am., I, 1869, p. 7.

Dendrocopus lucasanus (Subsp. *a*.) HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 250.

Dryobates scalaris lucasanus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 141, 150 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 252.

Range: Cape San Lucas region, Lower California.

2: Southern Lower California (Laguna 1, "Lower California" 1).

[a] *Cf.* Ridgway, *l. c.*, p. 251, footnote.

Dryobates scalaris eremicus *Oberholser*. SAN FERNANDINO WOODPECKER.

Dryobates scalaris eremicus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 141, 151 (San Fernando, northwestern Lower California); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 253.

Dryobates scalaris lucasanus Am. Orn. Union Check List, 3rd ed., 1910, p. 188, part.

Range: Pacific coast district of northern Lower California.

***Dryobates scalaris cactophilus** *Oberholser*. CACTUS WOODPECKER.

Dryobates scalaris cactophilus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 152 (Tucson, Arizona); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 254.

Range: Extreme western Texas, westward through New Mexico and Arizona to southern California (San Bernardino Co., Riverside Co., San Diego Co., etc.) and northern Lower California, north to southern Nevada and southern Utah and southward through northern and middle Sonora and Chihuahua, Mexico.

†24: Arizona (Calabasas 4, Phœnix 2, Huachuca Mts., 1, Tucson 4, "Arizona" 4); New Mexico (Deming 7); Texas (Cameron Co., 1, El Paso 1).

Dryobates scalaris centrophilus *Oberholser*. JALISCO WOODPECKER.

Dryobates scalaris centrophilus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 157 (Ameca, Jalisco, west-central Mexico); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 256.

Range: Western Mexico, from southern Durango, Zacatecas and Jalisco to Michoacan and Tepic.

***Dryobates scalaris symplectus** *Oberholser*. TEXAS WOODPECKER.

Dryobates scalaris symplectus OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 155 (Mouth of Nueces River, Texas); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 257.

Range: Southern, central and western Texas (east of the Picos River) and southeastern Colorado and southward in Mexico in northern Coahuila, Nuevo Leon and about the northern half of Tamaulipas.

5: Texas (Corpus Christi 2, Kendal Co. 1); Mexico (Pabinas, Coahuila 2).

Dryobates scalaris bairdi (*Malherbe*). BAIRD'S WOODPECKER.

Picus bairdi MALHERBE, Mon. Picidæ, I, 1861, p. 118 (State of Hidalgo, Mexico)[a]; III, 1861, pl. 27, figs. 7-8.

[a] Type locality fixed by Oberholser, *l. c.*

Dryobates scalaris bairdi OBERHOLSER, Proc. U. S. Nat. Mus., XLI, 1911, pp. 140, 158 (Monogr.); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 258.

Range: Southeastern portion of Mexican plateau in states of Puebla, San Luís Potosí, Hidalgo, Guanajuato, Coahuila and in state of Mexico (Valley of Mexico, Tetelco, etc.).

***Dryobates stricklandi** (*Malherbe*). STRICKLAND'S WOODPECKER.

Picus (*Leuconotopicus*) *stricklandi* MALHERBE, Rev. Zool., 1845, p. 373 (Mexico).
Picus stricklandi MALHERBE, Mon. Picidæ, I, 1861, p. 108, part; III, 1861, pl. 28, figs. 4, 5, 6.
Dendrocopus stricklandi HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 243, part.
Dryobates stricklandi RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 259.

Range: Southeastern Mexico in states of Vera Cruz, Puebla, Mexico and Moreles.

1: Mexico (Rio Frio).

***Dryobates arizonæ arizonæ** (*Hargitt*). ARIZONA WOODPECKER.

Picus arizonæ HARGITT, Ibis, 1886, p. 115, in text (Santa Rita Mts., Arizona).
Dendrocopus arizonæ Am. Orn. Union Check List, 3rd ed., 1910, p. 188; SWARTH, Pacific Coast Avifauna, No. 4, 1904, p. 11, crit.
Dryobates arizonæ arizonæ MILLER, Bull. Am. Mus. Nat. Hist., XXII, 1906, p. 166 (Durango); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 261.

Range: Southern Arizona and southwestern New Mexico and southward in Mexico in states of Sonora and Chihuahua to northwestern Durango.

†13: Arizona (Huachuca Mountains).

***Dryobates arizonæ fraterculus** *Ridgway*. COLIMA WOODPECKER.

Dryobates arizonæ fraterculus RIDGWAY, Man. N. Am. Bds., 1887, p. 286 (Sierra Madre, Colima, southwestern Mexico); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 263.

Range: Southwestern Mexico in states of Sinaloa, Jalisco, Colima, Zacatecas and Territory of Tepic.

1: Mexico (30 miles west of Miñaca, Chihuahua).

Genus **XENOPICUS** Baird

Xenopicus Baird, Rep. Pacific R. R. Survey, IX, 1858, p. 83, in text (Type, by monotypy, *Leuconerpes albolarvatus* Cassin).

***Xenopicus albolarvatus albolarvatus** (*Cassin*). WHITE-HEADED WOODPECKER.

Leuconerpes albolarvatus CASSIN, Proc. Acad. Nat. Sci. Phila., V, 1850, p. 106 (Oregon Canyon, near Georgetown, 12 miles from Sutter's Mill, Eldorado Co., California).

Picus albolarvatus BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 526, pl. 50, figs. 7-8.

Xenopicus albolarvatus MALHERBE, Mon. Picidæ, II, 1862, p. 221; IV, 1862, pl. 101, figs. 3-4; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 284.

Xenopicus albolarvatus albolarvatus GRINNELL, Pacific Coast Avifauna, No. 8, 1912, p. 14; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 265.

Range: Sierra Nevada and Cascade Mountains, from southern British Columbia, southward through Washington, Oregon and the greater part of California (Tejon Mountains, Kern Co., northward).

3: Washington (Dayton 1); "California" 2.

***Xenopicus albolarvatus gravirostris** (*Grinnell*). GRINNELL'S WOODPECKER.

Xenopicus gravirostris GRINNELL (J.), Condor, IV, 1902, p. 89 (Camp Chiles, Sierra San Gabriel, Los Angeles Co., California).

Xenopicus albolarvatus gravirostris GRINNELL (J.) Auk, 1905, p. 383 (Mt. Piños); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 267.

Range: San Gabriel, San Jacinto, San Bernardino and Cuyamaca mountains in Los Angeles, southern San Bernardino, Riverside and San Diego counties, southern California.

1: California (San Bernardino Mt.).

Genus **PHRENOPICUS** Bonaparte.

Phrenopicus Bonaparte, Ateneo Italiano, II, 1854, p. 123 (Type, as fixed by Gray, 1855, *Picus borealis* Vieillot).

***Phrenopicus borealis** (*Vieillot*). RED-COCKADED WOODPECKER.

Picus borealis VIEILLOT, Ois. Am. Sept., II, 1807, p. 66, pl. 122 ("Dans le nord des Etato-Unio" southern United States); BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bd s., II, 1874, p. 524, pl. 49, fig. 8.

Dendrocopus borealis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, pp. 251, 571.

Picus querulus WILSON, Am. Orn., II, 1810, p. 103, pl. 15, fig. 1 (North Carolina).

Picus vieillotii WAGLER, Syst. Av., 1827, *Picus*, sp. 20 (new name for *P. borealis* Vieillot).

Picus leucotis ILLIGER, LICHTENSTEIN, Verz. Doubl., 1823, p. 12 (new name for *P. querulus* Wilson).

Dryobates borealis Am. Orn. Check List, 3rd ed., 1910, p. 188.

Phrenopicus borealis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 269.

Range: Pine woods, districts of South Atlantic and Gulf states of eastern North America, from Florida to Virginia, Tennessee, western Kentucky and southeastern Missouri; casually to New Jersey and eastern Pennsylvania.

†22: Florida (West Jupiter 7, New River 2, Lake Worth 2, Tarpon

Springs 1, Melbourne, Indian River 1, Lantana, Lake Worth 4, Fort Meyers 1); Georgia (Thomasville 1, "Georgia" 2); Alabama (Elmore Co. 1).

Genus **SPHYRAPICUS** Baird.

Sphyrapicus Baird, Rep. Pacific R. R. Survey, IX, 1858, p. 101 (Type, by original designation, *Picus varius* Linnæus).

*Sphyrapicus varius varius (*Linnæus*). YELLOW-BELLIED SAPSUCKER.

Picus varius LINNÆUS, Syst. Nat., ed. 12, I, 1766, p. 176 ("America septentrionale"=Carolina); WILSON, Am. Orn., I, 1808, p. 147, pl. 9, fig. 2; AUDUBON, Orn. Biog., II, 1834, p. 519, pl. 190; *Id.*, Bds. Am., Oct. ed., IV, 1842, p. 263, pl. 267.

Sphyrapicus varius MALHERBE, Mon. Picidæ, I, 1862, p. 157; IV, 1862, pl. 37, figs. 2, 3, 4; CORY, Bds. Bahama Is., 1880, p. 121 (New Providence I.); *Id.*, Auk, 1886, p. 375; *Id.*, 1887, p. 181 (St. Andrews I., Caribbean Sea); *Id.*, 1891, p. 294 (Bahamas); *Id.*, Bds. West Indies, 1889, p. 170; SCOTT, Auk, 1890, p. 310 (Florida); *Id.*, 1892, p. 374 (Jamaica); CHAPMAN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 301 (Trinidad, Cuba); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 274; TODD, Ann. Carnegie Mus., X, 1916, p. 240 (Isle of Pines).

Sphyropicus varius HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 188; LOWE, Ibis, 1911, p. 150 (Little Cayman).

Range: Eastern North America, from Cape Breton I., Quebec, Mackenzie, central Keewatin, etc., and west to the Alhabaska R. in Alberta, breeding southward in wooded regions to northern Missouri, northern Indiana, northern Ohio and Massachusetts, and North Carolina (in mountains) and in winter to Florida and the Gulf Coast, Mexico and southward to Costa Rica; also the Greater Antilles (Cuba, Jamaica, St. Croix), Bahamas and Islands of the Caribbean Sea (Old Providence, St. Andrews, etc.): Casual in eastern Wyoming and Colorado; accidental in southern Greenland.

†80: Maine (Upton 1, New Vineyard 2, Lincoln 1); New York (Saratoga 1); Saskatchewan (Prince Albert 1); Wisconsin (Woodruff 2, Meridian 1, Beaver Dam 12); Illinois (Hegewische 1, Chicago 9, Lake George 1, Lake Forest 1, Grand Chain 1, Joliet 4); Indiana (Bluffton 1); Ohio (Garretsville 1); Tennessee (Waverly 1); Texas (Corpus Christi 1, Geddings 1); Florida (Punta Rassa 1, Key West 1, Santa Rosa 1, Starke 1, Pilot Town 1, East Pass 1); Mexico (Tampico 1, Vera Cruz 1); Guatemala (Lake Atitlan 1, Sierra St. Elena 1, Los Amates, Isabel 1); Costa Rica (Coliblanco 2); Bahama Islands (Inagua I. 5, Great Bahama I. 8, Caicos I. 3, Eleuthera I. 4, St. Andrews I. 1).

*Sphyrapicus varius nuchalis *Baird*. RED-NAPED SAPSUCKER.

Sphyrapicus varius var. *nuchalis* BAIRD, Rep. Pacific R. R. Survey, IX, 1858, p. 103, in text (Mimbres River, New Mexico).

Sphyropicus nuchalis HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 569.
Sphyrapicus varius nuchalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 279.

Range: Western North America, breeding from central British Columbia to Arizona, central New Mexico and western Texas and from northeastern California and eastern Oregon, east to Montana, Wyoming and western Kansas; in winter to Mexico, Lower California and Guatemala; casual during migrations to the Coast region of Washington and California.

†32: Colorado (Bartholdi Pass 1, Gore Range 1, Williams Range, Routte Co., 4); Montana (Colombia Falls 5, Lode Co. 1); Texas (Giddings 1, Ft. Davis 1); Arizona (Phœnix 2); Mexico (Chihuahua 16).

***Sphyrapicus ruber ruber** (*Gmelin*). NORTHERN RED-BREASTED SAPSUCKER.

Picus ruber GMELIN, Syst. Nat., I, pt. 1, 1788, p. 429 ("Cayenne" = Nootka Sound, British Columbia)[a].
Picus ruber notkensis SUCKOW, Anfangaser. Naturg. Th., II, I, 1800, p. 535 (Nootka Sound, British Columbia, based on "Coole's last Voy., II, 297").
Sphyropicus ruber HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 194, part (Vancouver I., British Columbia, etc.).
Sphyrapicus ruber notkensis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 284.
Sphyrapicus varius ruber SWARTH, Univ. Calif. Pub., Zool., X, 1912, p. 34, crit. (nomencl.).

Range: Northwest coast of North America, breeding from southern Alaska, western British Columbia and Vancouver, and western Washington to western Oregon; casually or irregularly southward in winter in California to Monterey.

2: Oregon (Salem 1, Logan 1).

***Sphyrapicus ruber daggetti** (*Grinnell*). CALIFORNIA RED-BREASTED WOODPECKER.

Sphyrapicus varius daggetti GRINNELL, Condor, III, 1901, p. 12 (Pasadena, Los Angeles Co., California).
Sphyrapicus ruber HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 194, part (California).
Sphyrapicus ruber ruber RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 282.

Range: California, from the northern part of the state to mountains

[a] In my opinion Mr. Swarth's arguments (*l. c.*, 1912, p. 34) in favor of considering Gmelin's *ruber* to represent the northern form, seems to be sound and should be accepted. For information concerning the case, see Grinnell, Condor, III, 1901, p. 12; Osgood, N. Am. Fauna, No. 21, 1901, p. 45; Richmond, Proc. Biol. Soc. Wash., XV, 1902, p. 89; Swarth, Univ. Calif. Pub., Zool., X, 1912, p. 34 and Ridgway, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 286, footnote.

of southern California, east to south-central Oregon and eastern slope of the Sierra Nevada Mts.; south in winter to Lower California.

11: California (Palo Alto 4, Clipper Gap 6, Willow Creek 1).

***Sphyrapicus thyroideus thyroideus** (*Cassin*). WILLIAMSON'S WOODPECKER.

Picus thyroideus CASSIN, Proc. Acad. Nat. Sci. Phila., 1851, p. 349 (California).

Sphyrapicus thyroideus MALHERBE, Mon. Picidæ, I, 1861, p. 162, part (California); III, 1861, p. 37, fig. 1; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 286, part (California and southern British Columbia).

Sphyropicus thyroideus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 196, part (California, Oregon).

Sphyrapicus thryoideus thryoideus SWARTH, Condor., XIX, 1917, p. 64 (California, Oregon, British Columbia).

Range: Southern British Columbia, Washington, Oregon and southward to southern California; Mexico in winter?

2: "California."

***Sphyrapicus thyroideus nataliæ**[a] (*Malherbe*). ROCKY MOUNTAIN WOODPECKER.

Picus nataliæ MALHERBE, Journ. für Ornith., 1854, p. 171 (Mexico).

Sphyropicus thyroideus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 196, part (Colorado, New Mexico, Arizona, Mexico).

Sphyrapicus thyroideus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 286, part (Arizona, New Mexico, Colorado, Wyoming, western Texas, Mexico).

Sphyrapicus thyroideus nataliæ SWARTH, Condor, XIX, 1917, pp. 63, 65 (Colorado, New Mexico, Arizona, Mexico).

Range: Rocky Mountain region; Colorado, Wyoming, New Mexico, Arizona; and in winter to western Texas and southward in Mexico to Durango and Jalisco.

8: Mexico (Chihuahua 5); Colorado (Evergreen 1, "Colorado" 1); New Mexico 1.

Genus **PICOIDES** Lacépède.

Picoides Lacépède, Tableau Ois., 1779, p. 9 (Type, as fixed by Gray, 1840, *Picus tridactylus* Linnæus).

***Picoides americanus americanus** *Brehm.* THREE-TOED WOODPECKER.

Picoides americanus BREHM, Handb. Vogel Deutschl., 1831, p. 195 (Amerika); MALHERBE, Mon. Picidæ, I, 1861, p. 176; III, 1861, pl. 39, figs. 1-2; BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, pl. 50, fig. 2; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 279 (New York, etc.).

[a] Differs chiefly in size of bill, which in this race is smaller and shorter, and while the difference is not very pronounced, it seems to be constant.

Picoides tridactylus var. *americanus* BAIRD, BREWER and RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 532, part.

Picus tridactylus AUDUBON, Orn. Biog., 1834, p. 197, pl. 132.

Picus hirsutus VIEILLOT, Nouv. Dict. d'Hist. Nat., XXVI, 1818, p. 103, part.

Picoides americanus americanus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 291.

Range: Boreal forested regions of North America, chiefly east of the Rocky Mountains, from Labrador and northern Ungava, west to Alberta, British Columbia and eastern Idaho; breeds from Anticoste I., northern New York and northern Ontario, northward. Winter range extends to northern portions of Minnesota, Wisconsin, Michigan, southern Ontario and irregularly to Massachusetts.

†15: Maine (Bangor 9; Megallaway River 2, "Maine" 4).

***Picoides americanus fasciatus** *Baird*. ALASKAN THREE-TOED WOODPECKER.

[*Picoides americanus*] var. *fasciatus* BAIRD, in Cooper's Orn. Calif., 1870, p. 385, part (Type from Fort Simpson, Mackenzie).

Picoides tridactylus alascensis NELSON, Auk, 1884, p. 165 (Nulato, Alaska).

(?) *Picoides americanus fumipectus* GRINNELL, Univ. Calif. Pub., Zool., V, 1909, p. 217 (Hoonah, Chichagoff I., Alaska).

Picoides americanus fasciatus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 295.

Range: Hudsonian and Canadian zones in Alaska; Mackenzie and Keewatin south to southern British Columbia (Vancouver I., etc.), southern Alberta, southern Keewatin and northern Montana (Columbia Falls, etc.); casual in Washington (Chilowyuck Lake).

4: Montana (Columbia Falls 3); Alberta (Banff 1).

***Picoides americanus dorsalis** (*Baird*). ALPINE THREE-TOED WOODPECKER.

Picoides dorsalis BAIRD, Rep. Pacific R. R. Surv., IX, 1858, p. 100 (Laramie Peak, Wyoming); MALHERBE, Mon. Picidæ, I, 1861, p. 179.

Picoides americanus dorsalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 297.

Range: Forested regions in mountains from northern Montana and Wyoming, southward through mountains from Colorado to New Mexico and Arizona.

2: Wyoming (Laramie Peak I); locality ? 1.

***Picoides arcticus** (*Swainson*). BLACK-BACKED THREE-TOED WOODPECKER.

Picus (*Apternus*) *articus* SWAINSON, Fauna Bor.-Am., II, 1831, pp. xxvi, 313 (eastern slope of Rocky Mts. near sources of Athabasca River).

Picus arcticus AUDUBON, Birds Am., oct. ed., IV, 1842, p. 266, pl. 268.
Picoides arcticus MALHERBE, Mon. Picidæ, I, 1861, p. 174; III, 1861, pl. 39, figs. 5-6; BAIRD, BREWER & RIDGWAY, Hist. N. Am. Bds., II, 1874, p. 530, pl. 50, fig. I; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 282; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 298.

Range: Northern North America from central Alaska, Yukon, central Keewatin and northern Ungava; southward to mountains of northeastern California, Nevada, Idaho, Wyoming, Montana, South Dakota (Black Hills), Minnesota, northern Michigan and northern Wisconsin, northern New York, Vermont, New Hampshire and Maine; in winter irregularly southward to Massachusetts, Connecticut, Pennsylvania (Pocono Mountains), southern Ontario, northern Ohio, northeastern Illinois, Wisconsin and eastern Nebraska.

†12: Maine (Gardner 1); Ontario (Elmsdale I); Newfoundland (Bay St. George 2); New Brunswick (St. John 1); Wisconsin (Woodruff, Vilas County 6); Alberta (Banff 1).

Subfamily Picumninæ

Genus **PICUMNUS** Temminck.

Picumnus Temminck, Planch. Col., livr. 62, 1825, pl. 371 and text (Type *Picumnus cirrhatus* Temminck).

Picumnus rufiventris (*Bonaparte*). RUFOUS-VENTED PICULET.

Asthenurus rufiventris BONAPARTE, Proc. Zool. Soc. Lond., 1837, p. 120 (Ecuador).
Picumnus rufiventris LAFRESNAYE, Rev. Zool., 1845, p. 366; MALHERBE, Mon. Picidæ, II, 1862, p. 283; IV, 1862, pl. 118, fig. 2; TACZANOWSKI, Orn. Pérou, III, 1886, p. 63; HARGITT, Cat. Bds. Brit. Mus., XIII, 1890, p. 527 (Rio Napo, Sarayacu, Ecuador; Sarayacu, Peru); (?) SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 225 (Ponte Allegre, Rio Purús).

Range: Ecuador and Peru; western Brazil?

***Picumnus cinnamomeus cinnamomeus** *Wagler*. CINNAMON PICULET.

Picumnus cinnamomeus WAGLER, Isis, 1829, p. 646 (Carthagena, Colombia); MALHERBE, Mon. Picidæ, II, 1862, p. 277; IV, 1863, pl. 119, figs. 4-5; ALLEN, Bull. Am. Mus. Nat. Hist., XIII, 1900, p. 137 (Bonda, Colombia); CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 356 (La Playa and Varrud, northern Colombia).

Range: Northern Colombia and arid coast region of northwestern Venezuela.

2: Empelado Savanna, northeast of Maracaibo, Venezuela.

***Picumnus cinnamomeus venezuelensis**[a] (*Cory*). VENEZUELAN CINNAMON PICULET.

Picumnus venezuelensis CORY, Field Mus. Nat. Hist., Orn. Ser., I, No. 7, 1913, p. 288 (Encontrados, Zulia, northwestern Venezuela).

Range: Low, humid, forested region of northwestern Venezuela.

1: Venezuela (Encontrados, Zulia); the type specimen.

Picumnus castelnaui *Malherbe*. CASTELNAU'S PICULET.

Picumnus castelnaui MALHERBE, Mon. Picidæ, II, 1862, p. 281 (not plate); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 528.

Picumnus castelnaudi SCLATER and SALVIN, Proc. Zool. Soc. Lond., 1866, p. 196; *Id.*, 1873, p. 290; TACZANOWSKI, Orn. Pérou, III, 1886, p. 64.

Range: Ecuador and Peru.

***Picumnus leucogaster** *Pelzeln*. WHITE-BELLIED PICULET.

Picumnus leucogaster PELZELN, Orn. Bras., 1870, p. 241 (Rio Branco, northern Brazil); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 95 (Altagracia and Caicara, Orinoco region, Venezuela); CHERRIE, Mus. Brooklyn Inst. Arts and Sci., Sci. Bull., II, No. 6, 1916, p. 309 (Altagracia and Caicara, middle Orinoco River, Venezuela).

Picumnus castelnaui MALHERBE, Mon. Picidæ, III, 1862, pl. 117, figs. 1-2 (not text, II, 1862, p. 281).

Range: Northern Brazil (Rio Branco region, etc.) northward to middle Orinoco region, Venezuela.

2: Brazil (Boa Vista, Rio Branco).

Picumnus fuscus *Pelzeln*. DUSKY PICULET.

Picumnus fuscus PELZELN, Orn. Bras., 1870, 335 (Guapore); PELZELN and LORENZ, Ann. k.-k. Naturalist. Hofm. Wien, 1888, p. 42; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 530.

Range: Rio Guapore, west of Matto Grosso, Brazil.

Picumnus temminckii *Lafresnaye*. TEMMINCK'S PICULET.

Picumnus temminckii LAFRESNAYE, Rev. Zool., 1845, pp. 6; 111 (Paraguay); PELZELN, Orn. Bras., 1870, p. 240, 442; BERLEPSCH and VON IHERING, Madar. Zeitsch. Gesmamm. Orn., II, 1885, p. 156, pl. IX, fig. 2.

[a] *Picumnus cinnamomeus venezuelensis* (CORY): Approaches *P. cinnamomeus cinnamomeus*, but differs in being darker and having the under parts deeper chestnut; the anterior part of the forehead rufous chestnut, and no white spots on the posterior part of the crown. Back, rump and scapulars rufous brown; under parts darker approaching deep rufous chestnut; nape and sides of the head dark like the under parts; frontal band rufous chestnut on anterior part, shading posteriorly into buff; crown black, the feathers broadly tipped with golden yellow nearly as in *cinnamomeus* but without white spots at the extreme hinder part as in that species; wings and tail as in *cinnamomeus*. Length (skin), 97 mm.; wing, 53; tail, 33; bill, 12; tarsus, 12.

(?) *Picumnus jheringi* BERLEPSCH, Ibis, 1884, p. 441 (Rio Grande do Sol); VON IHERING, Aves do Brazil, I, 1907, p. 190 (Rio Grande do Sol).

Picumnus temmincki HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 530 (Rio Grande do Sol; Ypanema, southern Brazil); DABBENE, Bol. Soc. Physis, I, 1914, p. 325 (Missiones, northeastern Argentina).

Picumnus buffoni (not of Lafresnaye) MALHERBE, Mon. Picidæ, II, 1862, p. 295; IV, 1862, pl. 116, figs. 3-4.

Range: Southern Brazil, Paraguay and extreme northeastern Argentina (Terr. Missiones).

***Picumnus cirrhatus cirrhatus** *Temminck*. TUFTED PICULET.

Picumnus cirrhatus TEMMINCK, Pl. Col., livr., 62, pl. 371, fig. 1 and text ("Bresil"); DESCOURTILZ, Orn. Bras, 1852, pl. 19, fig. 1; PELZELN, Orn. Bras., 1870, pp. 241, 442; HELLMAYR, Verh. der Ornith. Gesell. Bayern, XII, 1915, p. 154 (Rio de Janeiro; Espirito Santo; São Paulo; Minas Geraes).

Picumnus cirrhatus HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 531 (Bahia; Rio de Janeiro; Novo Fribourgo, Brazil).

Picumnus cayennensis MALHERBE, Mon. Picidæ, IV, 1862, pl. 120, figs. 1-2.

Picumnus azaræ CABANIS and HEINE, Mus. Hein., IV, 1863, p. 20.

Range: Southern and southeastern Brazil.

1: Brazil (Rio das Velhas, near Lagoa Santa, Minas Geraes).

Picumnus cirrhatus pilcomayensis[a] (*Hargitt*). PILCOMAYO PICULET.

Picumnus pilcomayensis HARGITT, Ibis, 1891, p. 606 (Rio Pilcomayo); CHUBB, Ibis, 1910, p. 384 (Sapucay, Paraguay); GRANT, Ibis, 1911, p. 323 (Paragra, near Santa Elena, northern Argentina).

Picumnus cirrhatus VON IHERING, Revista Mus. Paulista, VI, p. 334.

Picumnus cirrhatus tucumanus HARTERT and VENTURI[b], Nov. Zool., XVI, 1909, p. 229 (Rio Colorado, Tucuman, Argentina).

Range: Northern Argentina (Tucuman; Salta, etc.) and Paraguay.

Picumnus cirrhatus macconnelli (*Sharpe*).[c] MCCONNELL'S PICULET.

Picumnus macconnelli SHARPE, Bull. Brit. Orn. Club, XII, 1901, p. 4 (British Guiana); CHUBB, Bds. Brit. Guiana, I, 1916, p. 495, pl. X, fig. 1.

Picumnus cirrhatus macconnelli HELLMAYR, Nov. Zool., XIII, 1906, p. 34, part (British Guiana); VON IHERING, Aves do Brazil, I, 1907, p. 189 (Pará, Marajo; Guiana).

[a] *Picumnus cirrhatus pilcomayensis* (HARGITT): Intermediate between *P. cirrhatus cirrhatus* and *P. d'orbignyanus*. Differs from *cirrhatus cirrhatus* in lacking the brown auricular spot; back more grayish-brown with white bars and lacks the buff tinge on flanks and thighs. Differs from *orbignyanus* in having under parts clearly barred with black and upper parts barred with brownish white (not spotted).

[b] Cf. Hellmayr, Verh. der Orn. Gesell. Bayern, XII, 1915, p. 156, in text.

[c] *Picumnus cirrhatus macconnelli* (SHARPE): Adult male: Back and wings pale earth brown, some of the feathers tipped and edged with white; tail feathers black, margined with white; front of crown red; nape black; some of the feathers fringed or minutely spotted with white; underparts white narrowly banded with black. Wing, 54; culmen, 12 mm.

Picumnus amazonicus SNETHLAGE, Orn. Monatsber., XIV, 1906, p. 60 (District of Pará).[a]

Range: British Guiana east to Para.

Picumnus varzeæ[b] *Snethlage.* VARZEA PICULET.

Picumnus varzeæ SNETHLAGE, Ornith. Monatsb., XX, No. 10, 1912, p. 154 ("Fazenda Paraiso bei Faro," Rio Jamunda); *Id.*, Bol. Mus Goeldi, VIII, 1914, p. 256 (Obidos, Rio Jamunda).

Range: Northeastern Brazil.

***Picumnus spilogaster** *Sundevall.* SUNDEVALL'S PICULET.

Picumnus spilogaster SUNDEVALL, Consp. Av. Picin., 1866, p. 100 (Guiana); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 532; CHUBB, Bds. Brit. Guiana, I, 1916, p. 498 (Upper Takutu Mts.; Ituribisi River; Supenaam River; Bartica; Bonaskia River; Abary River; Georgetown, British Guiana); BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 59 (Paramaribo).

Range: British Guiana.

2: British Guiana (Georgetown).

Picumnus d'orbignyanus *Lafresnaye.* D'ORBIGNY'S PICULET.

Picumnus d'orbignyanus LAFRESNAYE, Rev. Zool., 1845, p. 7 (Bolivia); CABANIS and HEINE, Mus. Hein., IV, 1863, p. 15; REICHENBACH, Scans. Picinæ, 1854, p. 345.

Picumnus orbignyanus MALHERBE, Mon. Picidæ, II, 1862, p. 283; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 533 (Salta); HARTERT and VENTURI, Nov. Zool., XVI, 1909, p. 229 (Rio San Francisco, Prov. Jujuy, Argentina); DABBENE, Anals. Mus. Nac. Buenos Aires, XVIII, 1910, p. 278 (San Lorenzo, Jujuy; eastern Salta, Argentina).

Range: Bolivia and northern Argentina.

Picumnus sclateri *Taczanowski.* SCLATER'S PICULET.

Picumnus sclateri TACZANOWSKI, Proc. Zool. Soc. Lond., 1877, p. 327 (Lechugal); BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1883, pp. 537, 570; *Id.*, 1885, p. 122; TACZANOWSKI, Orn. Pérou, III, 1886, p. 66; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 534 (Guayaquil and Balzar Mts., Ecuador.

Range: Ecuador and Peru.

[a] I have not seen birds from Para (*amazonicus* of Snethlage). Hellmayr (Nov. Zool., XIII, 1906, pp. 349–350) and von Ihering (*l. c.*) consider it a synonym of *P. c. macconnelli* and include northeastern Brazil (Para, etc.) in the range for that form. Nevertheless Chubb (Bds. Brit. Guiana, I, 1916, p. 498) restricts the range of *macconnelli* to British Guiana.

[b] *Picumnus varzeæ* SNETHLAGE: Male, Nasal feathers yellowish; forehead up to the crown, fiery red, the feathers with black bases; rear of head up to the ear coverts, black with round white spots; sides of the head very narrowly banded with black and white; wings brownish gray, the border of the flight feathers brighter;

Picumnus steindachneri *Taczanowski*. STEINDACHNER'S PICULET.

Picumnus steindachneri TACZANOWSKI, Proc. Zool. Soc. Lond., 1882, p. 40, pl. II, figs. 1-2 (Chirimoto); *Id.*, Orn. Pérou, III, 1886, p. 67; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 535 (Chirimoto, Huayabamba Valley).

Range: Northeastern Peru.

Picumnus jelskii *Taczanowski*. JELSKI'S PICULET.

Picumnus jelskii TACZANOWSKI, Proc. Zool. Soc. Lond., 1882, p. 41, pl. 11, fig. 3 (Chanchamayo, Peru); *Id.*, Orn. Pérou, III, 1886, p. 68.

Range: Central Peru (Paltapampa and Valley of the Chanchamayo).

Picumnus stellæ[a] *Berlepsch and Hartert*. STELLA'S PICULET.

Picumnus stellæ BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 96 (Maipures, Rio Orinoco, Venezuela); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 309 (Upper Orinoco, above falls of Atures).

Range: Venezuela.

***Picumnus pygmæus** (*Lichtenstein*). PIGMY PICULET.

Picus pygmæus LICHTENSTEIN, Verz. Doubl., 1823, p. 11 ("Brasilia").
Picumnus ocellatus WAGLER, Isis, 1829, p. 646; PELZELN, Orn. Bras., 1870, p. 442.
Picumnus pygmæus GRAY, Gen. Bds., II, 1845, p. 432, pl. 107; MALHERBE, Mon. Picidæ, II, 1862, p. 285; IV, 1862, pl. 115, figs. 3, 4, 5; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 537 (Bahia; Novo Fribourgo, Brazil).

Range: Southeastern Brazil, from Bahia southward.

2: Brazil (Macaco Secco, near Andarahy, Bahia).

Picumnus asterias *Sundevall*. BRAZILIAN PICULET.

Picumnus asterias SUNDEVALL, Consp. Av. Picin., 1866, p. 97 ("Brasilia"); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 538.

Range: Brazil.

Picumnus guttifer (*Sundevall*) MATTO GROSSO PICULET.

Picumnus guttifer SUNDEVALL, Consp. Av. Picinæ, 1866, p. 101 (Prov. Goyaz, Brazil); ALLEN, Bull. Am. Mus. Nat. Hist., V, 1893, p. 132 (Chapada, Matto Grosso); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 538 (Chapada, Matto Grosso); HELLMAYR, Nov. Zool., XV, 1908, p. 83 (Goyaz and Faz Esperanca, Prov. Goyaz); VON IHERING, Aves do Brazil, I, 1907, p. 190 (Goyaz; Matto Grosso; São Paulo).

chin black, narrowly banded with white; throat and breast black with more or less numerous, somewhat triangular chalk white spots; rest of underparts bright yellowish brown, banded with black (in adults); tail like that of *cirrhatus*. Wing, 52–55; tail, 29–33; bill, 13–14 mm.

[a] *Picumnus stellæ* BERLEPSCH and HARTERT: Somewhat resembles *P. wallacii* Hargitt, but distinguished at once by the abdomen being banded with narrow cross lines of black like the chest (instead of dusky spots). Differs from *P. punctifrons* of Peru in its pale brown (not black) hinder part of the pileum; under brown ear coverts narrower black bars on under parts and more extended area of the yellow spots on the forehead.

Picumnus sagittatus SUNDEVALL, Consp. Av. Picinæ, 1866, p. 103 (Rio Tocantins, in southern part of Prov. of Goyaz);[a] PELZELN, Orn. Bras., 1870, pp. 241, 442 (Goyaz, Cuyabá, etc.); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 534.

Picumnus sagittatus var. *sharpei* VON IHERING, Revista Mus. Paulista, V, 1901, p. 279 (Rincao; Baru; northern São Paulo).

Picumnus caipira VON IHERING, Revista Mus. Paulista, V, 1901, p. 280 (Victoria perto de Botucactu).

Range: Central Brazil (from central Goyaz, western Minas Geraes and central and southern Matto Grosso, south to northern São Paulo).

Picumnus albosquamatus *Lafresnaye.* WHITE-SCALED PICULET.

Picumnus albosquamatus LAFRESNAYE, in D'Orbigny's Voy. Amer. Merid., IV, Ois., 1835-44, p. 380, pl. LXIV, fig. 2 (Yungas); MALHERBE, Mon. Picidæ, II, 1862, p. 283; IV, 1862, pl. 115, fig. 2; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 539.

Picumnus albosquamatus BONAPARTE, Consp. Gen. Av., I, 1850, p. 140.

Range: Bolivia.

***Picumnus minutissimus** *Pallas.* SCALE-EARED PICULET.

Picus minutissimus PALLAS, Neue Nordische Beytrage, III, 1782, p. 5, pl. 1, fig. 2 ("Surinam und Cajenne" = Surinam).[b]

Yunx minutissima GMELIN, Syst. Nat., I, 1788, p. 423 (Cayenne).

Picumnus lepidotus CABANIS and HEINE, Mus. Hein., IV, 1863, p. 14 (loc. ignot.); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 539 (Cayenne and Surinam); PENARD and PENARD, Vog. von Guyana, I, 1908, p. 560.

Picumnus minutissimus BERLEPSCH, Nov. Zool., XV, 1908, p. 274 (Cayenne).

Range: Dutch Guiana and French Guiana.

1: Dutch Guiana (near Paramaribo).

***Picumnus squamulatus squamulatus** *Lafresnaye.* SCALED PICULET.

Picumnus squamulatus LAFRESNAYE, Rev. et Mag. de Zool., 1854, p. 208 (Colombia); MALHERBE, Mon. Picidæ, II, 1862, p. 282; IV, 1862, pl. 117, figs. 3-4; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 540, part (Colombia).

Picumnus squamulatus squamulatus CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 356 (Buena Vista; Villavicencio; Quetame, Colombia.)

Range: Colombia.

2: Colombia ("Bogotá").

***Picumnus squamulatus obsoletus**[c] (*Allen*). ALLEN'S PICULET.

[a] *Cf.* Hellmayr, Nov. Zool., XV, 1908, p. 83, footnote.

[b] As designated by Berlepsch, *l. c.*, p. 274.

[c] *Picumnus squamulatus obsoletus* (ALLEN): Differs from *P. s. squamulatus* from Colombia in its somewhat smaller size; and in the nearly obsolete squamation of both upper and underparts.

Picumnus obsoletus ALLEN, Bull. Am. Mus. Nat. Hist., IV, 1892, p. 55 ("El Pilar" near Carupano, coast of northeastern Venezuela); HELLMAYR, and SEILERN, Arch. für Naturg., Abt. A, 5 Heft, 1912, p. 152 (Las Quigas, S. Esteban, Venezuela).

Range: Venezuela and eastern border line of Colombia, near Cucuta.[a]

†15: Venezuela (Maracay 2; Caracas 5; Encontrados, Zulia 2; Catatumbo 3; Colon, Tachira 1); Colombia (near Cucuta, close to the Venezuelan line 2).

Picumnus nebulosus *Sundevall.* SUNDEVALL'S PICULET.

Picumnus nebulosus SUNDEVALL, Consp. Av. Picinæ, 1866, p. 103 (Southern Brazil); HARGITT, Cat. Bds. Brit., Mus., XVIII, 1890, p. 536 ("Huiro Peru" *errore?*); VON IHERING, Revista Mus. Paulista, V, 1902, p. 280 (São Paulo, Brazil).

Range: Southern Brazil.

Picumnus exilis (*Lichtenstein*). LITTLE PICULET.

Picus exilis LICHTENSTEIN, Verz. Doubl., 1823, p. 11 (São Paulo, eastern Brazil).

Picumnus exilis GRAY, Gen. Bds., II, 1845, p. 432.

Picumnus minutus (not of Linnæus) PELZELN, Orn. Bras., 1870, pp. 241, 442; HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 542.

Picumnus hypoxanthus MALHERBE, Mon. Picidæ, 1862, II, p. 294; IV, 1862, pl. 119, figs. 1-2.

Picumnus guttatus MALHERBE, Mon. Picidæ, IV, 1862, pl. 119, fig. 3.

Range: Eastern Brazil (Bahia to São Paulo).

***Picumnus undulatus**[b] *Hargitt.* UNDULATED PICULET.

Picumnus undulatus HARGITT, Ibis, 1889, p. 354 (Mt. Roraima, British Guiana); BERLEPSCH and HARTERT, Nov. Zool., IX, 1902, p. 95 (La Union; Suapure; La Pricion and Nicare, Caura R., Venezuela); CHUBB, Bds. Brit. Guiana, I, 1916, p. 499, pl. X, figs. 3-4 (British Guiana and Cayenne); CHERRIE, Mus. Brooklyn Inst. Arts & Sci., Sci. Bull., II, No. 6, 1916, p. 309 (Perico; Nericagua, Upper Orinoco, Venezuela).

Range: Eastern Venezuela and British Guiana; Cayenne?[c]

[a] Specimens from Cucuta are somewhat intermediate but close to *obsoletus*.

[b] *Picumnus undulatus* HARGITT: Very similar to *P. buffoni* and undoubtedly a race of *buffoni* if the two forms do not occur in the same region. *P. undulatus* differs chiefly from *buffoni* in having the upper parts darker and more brownish olive.

[c] HARGITT and CHUBB both include Cayenne. I have not seen specimens from Cayenne and have not been able to compare specimens from Venezuela with those from the type locality. Berlepsch (Nov. Zool., XV, 1908, p. 274) believes *undulatus* to be a race of *buffoni* and that true *undulatus* does not occur in Cayenne.

2: Brazil (Base of Serra da Lua, near Boa Vista, Rio Branco region).[a]

Picumnus salvini[b] *Hargitt.* SALVIN'S PICULET.

Picumnus salvini HARGITT, Bull. Brit. Orn. Club, III, 1893, p. 3 (Bogotá); BRABOURNE and CHUBB, Bds. So. Am., I, 1912, p. 180 (Colombia).

Range: Colombia.

Picumnus buffoni *Lafresnaye.* BUFFON'S PICULET.

Picumnus buffoni LAFRESNAYE, Rev. Zool., 1845, p. 6 (Cayenne); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 544 (Cayenne); BERLEPSCH, Nov. Zool., XV, 1908, p. 274 (Cayenne).

(?) *Pipra minuta* LINNÆUS, Mus. Adolp. Frid. tom. II, Prodr. 1764, p. 34 (Loc. ignot. an ex Surinam?); *Id.*, Syst. Nat., ed. 12, 1766, p. 340 ("Habitat in Indiis").

Picumnus exilis (not of Lichtenstein) MALHERBE, Mon. Picidæ, IV, 1862, pl. 116, figs. 5-6.

P[*icumnus*] *penardi* PENARD and PENARD, De Vog. van Guyana, I, 1908, p. 559 (Dutch Guiana).[c]

Picumnus buffoni buffoni BANGS and PENARD, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 59 (Paramaribo and Lelydorp, Surinam).

Range: French and Dutch Guiana.

Picumnus punctifrons *Taczanowski.* GOLD-FRONTED PICULET.

Picumnus punctifrons TACZANOWSKI, Orn. Pérou, III, 1886, p. 65 (Monterico, Peru); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 544 (Huambo).

Range: Central and northeastern Peru.

***Picumnus lafresnayei** *Malherbe.* LAFRESNAYE'S PICULET.

Picumnus lafresnayei MALHERBE, Mon. Picidæ, II, 1862, p. 282; IV, 1862, pl. 118, figs. 4-5.

Picumnus lafresnayii HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 545.

Range: Ecuador and northern Peru.

7: Peru (Moyobamba).

[a] Two specimens from base of Serra da Lua, near Boa Vista, Rio Branco region, I have referred provisonally to this form, but they differ sufficiently to suggest that a larger series may prove them not to be the same. They agree with *undulatus* in the brownish olive ground color of the upper parts.

[b] *Picumnus salvini* HARGITT: Similar to *P. undulatus* of Guiana, but distinguished by the feathers of the belly being black, spotted in the middle, and girded (or surrounded) with a fuscous margin and also in having the feathers of the throat tipped with black but without the median black spot. This bird is unknown to me.

[c] PENARD and PENARD (De Vog. van Guyana, *l. c.*) give Sclater credit for the name, but I am unable to find Sclater's original description. The explanation suggested by Bangs and Penard (*l. c.*) seems probable.

Picumnus aurifrons aurifrons (*Pelzeln*). AMAZONIAN GOLDEN-FRONTED PICULET.

Picumnus aurifrons PELZELN, Orn. Bras., 1870, p. 334 (Engenho do Gama); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 546 (Borba, Rio Madeira); HELLMAYR, Nov. Zool., XIV, 1907, p. 398 (Humaytha, Ril Madeira); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 257 (Rio Tocantins; Rio Caura); BEEBE, Zoologica, II, No. 3, p. 63 (Pará).

Picumnus aurifrons aurifrons HELLMAYR, Nov. Zool., XVII, 1910, p. 385 (Colima, S. Isabel; Jamarysinho).

Range: Northern Brazil.

Picumnus aurifrons flavifrons (*Hargitt*). YELLOW-FRONTED PICULET.

Picumnus flavifrons HARGITT, Ibis, 1889, p. 229 (Sarayacu, eastern Peru); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 547, pl. XIV, figs. 1-2 (Sarayacu); HELLMAYR, Nov. Zool., XIV, 1907, p. 80 (Teffe).

P[icumnus] aurifrons flavifrons HELLMAYR, Nov. Zool., XVII, 1910, p. 386, in text, crit.

Range: Eastern Peru and northwestern Brazil (Teffe).

Picumnus borbæ *Pelzeln*. PELZELN'S PICULET.

Picumnus borbæ PELZELN, Orn. Bras., 1870, pp. 241, 334 (Borba, Rio Madeira); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 547; HELLMAYR, Nov. Zool., XIV, 1907, p. 398 (Borba, Rio Madeira); *Id.*, XVII, 1910, p. 386 (Borba); SNETHLAGE, Bol. Mus. Goeldi, VIII, 1914, p. 257 (Rio Tapajoz; Rio Jamauchin).

Range: Madeira and Tapajoz River regions, Brazil.

Picumnus wallacii *Hargitt*. WALLACE'S PICULET.

Picumnus wallacii HARGITT, Ibis, 1889, p. 230 (upper Amazons); *Id.*, Cat. Bds. Brit. Mus., XVIII, 1890, p. 547, pl. XIV, fig. 3.

P. wallacii HELLMAYR, Nov. Zool., XIV, 1907, p. 80, in text.[a]

Range: Upper Amazons.

***Picumnus olivaceus olivaceus** *Lafresnaye*. OLIVACEUS PICULET.

Picumnus olivaceus LAFRESNAYE, Rev. Zool., VIII, 1845, p. 7 (Bogotá, Colombia); HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 548, part; STONE, Proc. Acad. Nat. Sci. Phila., 1899, p. 305 (Ibague).

Picumnus olivaceus olivaceus RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 34; *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 303, in key; HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1190; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 356 (La Frijolera; El Eden; Rio Toche; La Candela; San Agustin; La Palma; Chicoral; Honda; Puerto Berrio; Malena, Colombia).

[a] Suggests that the type of *P. wallacii* may prove to be an immature specimen of *P. aurifrons*.

Range: Central Colombia (from eastern slope of western Andes to western and eastern Andes, Bogotá, etc.).

3: "Colombia."

Picumnus olivaceus harterti *Hellmayr*. HELLMAYR'S PICULET.

Picumnus olivaceus harterti HELLMAYR, Bull. Brit. Orn. Club, XXIII, 1909, p. 67 (Paramba, northwest Ecuador); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1191; CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 357 (Barbacoas, Colombia).

Picumnus granadensis (not of Lafresnaye) HARTERT, Nov. Zool., V, 1898, p. 497 (Chimbo); GOODFELLOW, Ibis, 1902, p. 209 (Santo Domingo, Ecuador); BERLEPSCH and TACZANOWSKI, Proc. Zool. Soc. Lond., 1883, p. 570 (Chimbo; Yeguachi).

Range: Western Ecuador and southwestern Colombia.

***Picumnus olivaceus panamensis** *Ridgway*. PANAMA PICULET.

Picumnus olivaceus panamensis RIDGWAY, Proc. Biol. Soc. Wash., XXIV, 1911, p. 34 (Lion Hill, Panama); *Id.*, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 304; Stone, Proc. Acad. Nat. Sci. Phila., 1918, p. 259 (Gatun, Panama Canal Zone).

Range: Eastern Panama.

1: Panama (Colon).

***Picumnus olivaceus flavotinctus** (*Ridgway*). VERAGUA PICULET.

Picumnus flavotinctus RIDGWAY, Proc. U. S. Nat. Mus., XI, 1889, p. 543 (Pozo Azúl de Perrís, southwestern Costa Rica).

Picumnus olivaceus flavotinctus HARTERT, Nov. Zool., IX, 1902, p. 606, crit.; CARRIKER, Ann. Carnegie Mus., VI, 1910, p. 594 (Costa Rica; habits, etc.); HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1190; RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 306.

Range: Southwestern Costa Rica to western Panama.

4: Costa Rica (Buenos Aires 3; Boruca 1).

Picumnus olivaceus dimotus (*Bangs*). HONDURAS PICULET.

Picumnus dimotus BANGS, Bull. Mus. Comp. Zool., XXXIX, 1903, p. 146, (Ceiba, Honduras).

Picumnus olivaceus dimotus HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1192 (Honduras and Nicaragua); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 307 (San Carlos, Nicaragua; and Ceiba; San Pedro; Sula and Julian, Honduras).

Picumnus olivaceus (not of Lafresnaye) HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 548, *part* (Honduras); SALVIN and GODMAN, Biol. Centr.-Am. Aves, II, 1895, p. 452 (Julian and San Pedro, Honduras).

Range: Honduras and eastern Nicaragua.

Picumnus granadensis granadensis *Lafresnaye.* GRANADA PICULET.

Picumnus granadensis LAFRESNAYE, Rev. Zool., 1847, p. 78 (Cali, Colombia).
Picumnus canus BANGS, Proc. Biol. Soc. Wash., XXIII, 1910, p. 72 (Naranjito, R. Dagua, Colombia).
Picumnus olivaceus granadensis HELLMAYR, Proc. Zool. Soc. Lond., 1911, p. 1189, part (Primavera; San Isidro; Medra Luna; San Antonio; Rio Dagua).
Picumnus granadensis granadensis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, p. 358 (San Antonio; Rio Frio; Los Cisneros; Gallera, Colombia).

Range: Western Colombia (south of Antioquia and north of Barbacoas and the Cauca Valley).

Picumnus granadensis antioquensis[a] *Chapman.* ANTIOQUIA PICULET.

Picumnus granadensis antioquensis CHAPMAN, Bull. Am. Mus. Nat. Hist., XXXIV, 1915, p. 640 (Peque, western Andes, Antioquia, Colombia); *Id.*, XXXVI, 1917, p. 358 (Peque; Medellin).

Range: Northwestern Colombia (Antioquia).

Genus **NESOCTITES** Hargitt.

Nesoctites HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 552 (Type *Picumnus micromegas* Sundevall).

***Nesoctites micromegas** (*Sundevall*). HAITIAN PICULET.

Picumnus micromegas SUNDEVALL, Consp. Av. Picinæ, 1866, p. 95 ("Rio Janeiro," Brazil; *errore* = Island of Haiti); BRYANT, Proc. Bost. Soc. N. H., XI, 1867, p. 96 (Santo Domingo); CORY, Auk, 1886, p. 376; *Id.*, Bds. West Indies, 1889, p. 167.
Picumnus lawrencii CORY, Bull. Nutt. Orn. Club, VI, 1881, pp. 129, 153, pl. 1, (Jacmel and Petionville, Haiti); *Id.*, Bds. Haiti and San Domingo 1884, p. 109, pl. 14; VERILL and VERILL Proc. Acad. Nat. Sci. Phila., 1909, p. 360 (Sanchez and Samana, Santo Domingo).
Nesoctites micromegas HARGITT, Cat. Bds. Brit. Mus., XVIII, 1890, p. 552 (Samana, San Domingo); CORY, Cat. Bds. West Ind., 1892, pp. 12, 103, 131; CHERRIE, Contr. Orn. San Domingo, 1896, p. 20 (San Domingo City, Catare and Aquacate, San Domingo; habits); RIDGWAY, Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 308.

Range: Island of Haiti (Republics of Haiti and San Domingo).

†73: San Domingo (Almercan 6; Samana 35; Puerto Plata 4; San Domingo City 8; Catare 15; Aquacate 2); Haiti (Jacmel 1; Le Coupe, a few miles east of Port au Prince, 2).

[a] *Picumnus granadensis antioquensis* CHAPMAN: "Similar to *P. g. granadensis*, but whole breast grayish, the flanks and abdominal region distinctly streaked. Differs conspicuously from all the races of *P. olivaceus* in being less yellow throughout" (Chapman).

ADDENDA

Page 18, 4th line from top change range so as to read:

Range: Palaeartic Region, whole of North America, Central America (at least to Guatemala), West Indies (Cuba; and St. Bartholomew I.) (*cf.* Bangs, Proc. New Engl. Zool. Cl., VI, 1919, p. 95), and northern South America?

Page 18, after *Asio flammeus bogotensis* Chapman add:

Asio flammeus breviauris (Schlegel). Southern Short-eared Owl.

Otus breviauris Schlegel, Mus. Pays-bas, ii, no. 11, 1863, p. 4 (Bresil).

Asio flammeus breviauris Bangs, Proc. New Engl. Zool. Cl., VI, 1919, p. 96 (diag., distr., etc.).

Range: Southern South America (from about S. latitude 15°) southward, and Juan Fernandes Islands.

Page 18, after *Asio flammeus breviauris* (Schlegel) add:

Asio flammeus sanfordi Bangs. Sanford's Short-eared Owl.

Asio flammeus sanfordi Bangs, Proc. New Engl. Zool. Cl., VI, 1919, p. 97 (Falkland Islands).

Range: Falkland Islands.

Page 24, after *Pulsatrix perspicillata perspicillata* (Latham) add:

Pulsatrix perspicillata trinitatis Bangs and Penard. Trinidad Spectacled Owl.

Pulsatrix perspicillata trinitatis Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 51.

A new subspecies described as being decidedly paler than the typical form.

Range: Island of Trinidad.

Pages 48 and 49, *Tyto perlata* (Licht.), and its subspecies are now regarded as races of the European Barn Owl, *Tyto alba alba* (Scopoli) (*cf.*, Hartert, Vög. Pal. Fauna, Heft VIII, (Bd. II, 2), 1913; Auk, XXXIII, 1916, p. 430). The specific name is also considered to be a synonym of *Tyto tuidara* Gray (*cf.*, Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 52). The American subspecies of *Tyto alba* (=*perlata* auct.) on pages 48 and 49 should therefore read as follows:

Tyto alba tuidara (Gray).

Tyto alba contempta (Hartert).

Tyto alba sticta (Madarasz).
Tyto alba guatemalæ (Ridgway).
Tyto alba pratincola (Bonaparte).
Tyto alba furcata (Temminck).
Tyto alba lucayana (Riley).

Page 55, Bangs and Penard (Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 47), consider *Ara severa* (Linn.) to be represented by two subspecies, the birds from the Guianas and Amazonian region being separable on account of their shorter wings and more naked cheeks. Birds from Encontrados, Venezuela approach the Guiana form having wing measurements of 222 to 236. If these characters prove sufficiently constant to be worthy of subspecific recognition, the forms will stand as follows:

Ara severa severa (Linnæus). Brazilian Macaw.
Psittacus severus Linnæus, Syst. Nat., ed. 10, I, 1758, p. 97 ("Indies" *i.e.*, Amazon River).[a]
Range: Guianas and Amazon Valley.

**Ara severa castaneifrons* (Lafresnaye). Lafresnaye's Macaw.
Ara castaneifrons Lafresnaye, Rev. Zool., 1847, p. 66 (Bolivia).
Range: Panama and Colombia to Bolivia.
1: Colombia (Rio Cauca).

Page 83, 9th line from bottom, to the range of *Amazona amazonica tobagensis* Cory add Trinidad (*cf.*, Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 48).

Page 141, after *Chætura brachyura* (Jardine) add:

Chætura brachyura prævelox[b] Bangs and Penard. St. Vincent Short-tailed Swift.
Chætura brachyura prævelox Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 60.
Range: St. Vincent, West Indies.

Page 171, *Phæochroa cuvierii notia* Todd becomes a synonym of *Phæochroa cuvierii berlepschi* Hellmayr and Seilern, as they are now considered to be inseparable.

Page 172, after *Thaumasius taczanowskii* (Sclater) add:

Thaumasius taczanowskii fractus Bangs and Noble. Huancabamba Humming Bird.

[a] Type locality substituted by Hellmayr (Abh. K. Bayer, Akad. Wiss., 1906, p. 578).

[b] *Chætura brachyura prævelox* BANGS and PENARD: Similar to *C. b. brachyura* (JARDINE) from Trinidad and Tobago, Guiana, etc., etc., but differs in having the underparts paler and browner and less blackish; rump and upper tail coverts distinctly paler, more ashy, the upper tail coverts much lighter and tipped with whitish. The type locality "St. Vincent" must, therefore, be excluded from the range of typical *C. b. brachyura*.

Thaumasius taczanowskii fractusaa Bangs and Noble, Auk, XXXV, 1918, p. 451.

Type locality: Huancabamba, northwestern Peru.

Page 175, *Agyrtrina chionopectus chionopectus* (Gould). White-breasted Emerald.

This becomes *Agyrtrina brevirostris chionopectus* (Gould). The type locality (Trinidad) and range, Trinidad and coast of Venezuela, remain unchanged (*cf.* Bangs and Penard *l. c.*).

Page 177, *Agyrtrina versicolor brevirostris* (Lesson). Short-billed Emerald.

This becomes *Agyrtrina brevirostris brevirostris* (Lesson); type locality Guiana (not southeastern Brazil), range — British and Dutch Guiana. *Agyrtrina chionopectus whitelyi* (Boucard) becomes a synonym (*cf.* Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 62).

Page 177, after *Agyrtrina versicolor versicolor* (Vieill.), add:

Agyrtrina versicolor brabournii[b] Bangs and Penard. Brabourne's Emerald.

Agyrtrina versicolor brabournii Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 63.

Agyrtrina versicolor brevirostris (not of Lesson) Simon and Hellmayr, Nov. Zool., XV, 1908, p. 1 in text.

Type locality: Bahia, Brazil.

Page 222, *Anthracothorax violicauda violicauda* (Bodd.). Black-throated Mango.

According to Bangs and Penard, Bull. Mus. Comp. Zool., LXII, No. 2, 1918, p. 64, this should stand — *Anthracothorax nigricollis nigricollis* (Vieillot).

Page 301, add Bolivia to the range of *Chætocercus burmeisteri* Sclater.[c]

Page 303, *Microstilbon insperatus* Todd is now considered a synonym of *Chætocercus burmeisteri* Sclater.

ERRATA

Page 21, 3rd line from top, for *Asio megellanicus algistus* read *Asio magellanicus algistus*.

[a] *Thaumasius taczanowskii fractus* Bangs and Noble: Similar to true *T. taczanowskii* (Sclater) but upper parts darker and purer green, less mixed with grayish and less coppery; bill much shorter.

[b] *Agyrtrina versicolor brabournii* BANGS and PENARD: Differs from *A. v. versicolor* (VIEILL.) of southern Brazil in having centre of chin, throat, and chest pure white or only slightly spotted with green.

[c] This would stand as *Microstilbon burmeisteri* (SCLATER) if genus *Microstilbon* TODD (*cf.* Todd. Proc. Biol. Soc. Wash., XXVI, 1913, p. 174) is accepted.

Page 21, on the 15th and 17th lines from bottom, for *logophonus* read *lagophonus*.

Page 22, on the 13th and 20th lines from top, for *megellanicus* read *magellanicus*.

Page 23, for *Bubo virginianus megellanicus* read *Bubo virginianus magellanicus*.

Page 29, 12th line from bottom for *Otus asio bendieri* read *Otus asio bendirei*.

Page 30, 15th line from top, for Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 677 read Bull. U. S. Nat. Mus., No. 50, VI, 1914, p. 697.

Page 38, 20th line from bottom, for *Surna iulula pallasi* read *Surnia ulula pallasi*.

Page 43, for *Gymnasio lawrencei lawrencii* read *Gymnasio lawrencii lawrencii*.

Page 43, 9th line from bottom, for *Gymnasio lawrencei exsul* read *Gymnasio lawrencii exsul*.

Page 44, 15th and 16th lines from bottom, for *Glaucidium gnoma haskinsii* read *Glaucidium gnoma hoskinsii*.

Page 47, for *Micropallas whitneyi idonea* read *Micropallas whitneyi idoneus*.

Page 49, 4th line from bottom, for Bull. Brit. Orn. Club, III, 1892, read Bull. Brit. Orn. Club, I, 1892.

Page 55, 10th line from top, exclude Colombia.

Page 80, 2nd line from top, for *Tiraca* read *Tirica*.

Page 80, 5th line from top, for *Psittacus tiraca* read *Psittacus tirica*.

Page 86, for *Amazona dufresneana* read *Amazona dufresniana*.

Page 101, for Humbold wherever it occurs read Humboldt.

Page 102, on lines 15, 18 and 20 from bottom, for *stillata* read *stellata*.

Page 103, 7th and 9th lines from top, for Grinnel read Grinnell.

Page 109, 11th line from top, for *Blectron platyrhynchus medianum* read *Electron platyrhynchus medianum*.

Page 110, 10th line from top, for *Pyionites superciliosus* read *Pyronites superciliosus*.

Page 113, 18th and 19th lines from bottom, for *Momotus lessonii exiquus* read *Momotus lessonii exiguus*.

Page 114, 17th and 18th lines from bottom, for *Barypthengus* read *Baryphthengus*.

Page 116, 5th line from top, for *Caprimulgus longicaudus* read *Caprimulgus longicaudatus*.

Page 116, 7th line from top, for *Nyctibius longicaudus* read *Nyctibius longicaudatus*.

Page 129, 7th line from top, for Marion County read Marin County.

Page 161, for *Phæthornis rupurumi rupurumi* read *Phæthornis rupurumii rupurumii*.

Page 161, 19th and 20th lines from top, for *Phæthornis rupurumi amazonicus* read *Phæthornis rupurumii amazonicus*.

Page 162, 3rd line from top, for *Phæthornis strigularis subrufescens* read *Phæthornis striigularis subrufescens*.

Page 165, for *Eutoxeres condamini gracilis* read *Eutoxeres condaminii gracilis*.

Page 166, 20th line from bottom, for *Ornisnya pampa* read *Ornismya pampa*.

Page 168, for *Campylopterus hemileucus* read *Campylopterus hemileucurus*.

Page 168, 2nd line from top, for *Trochilus hemileucus* read *Trochilus hemileucurus*.

Page 173, 19th line from top, for *Trochillus fallax* read *Trochilus fallax*.

Page 175, 15th line from bottom, for *Agytria leucogaster bahiæ* read *Agyrtria leucogaster bahiæ*.

Page 183, for *Saucerottea saucerottei warscewicza* read *Saucerottia saucerottei warscewiczi*.

Page 183, last line, for *Amazilia alfarcana* read *Amazilia alfaroana*.

Page 185, for *Saucerostia iodura* read *Saucerottia iodura*.

Page 188, 12th line from top, for *Goethsalia* read *Goethalsia*.

Page 189, 19th line from top, for *Eranna jucunda* read *Eranna jacunda*.

Page 195, 9th line from bottom, for *Gasilinna* read *Basilinna*.

Page 198, 19th line from top, for *Trochilus sapphirina* read *Trochilus sapphirinus*.

Page 208, 19th line from top, for Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 243 read Bull. U. S. Nat. Mus., No. 50, V, 1911, p. 543.

Page 216, for Genus *Calipharus* read Genus *Callipharus*.

Page 226, on lines 12, 16, 22 and 24 from bottom, for *Anthrocephala* read *Anthocephala*.

Page 235, 9th line from top, for *Delattria henrici salvini* read *Delattria henrica salvini*.

Page 250, for *Aglæactis cupripennis cupreipennis* read *Aglæactis cupreipennis cupreipennis*.

Page 250, 6th line from bottom, for *Trochilus cupripennis* read *Trochilus cupreipennis*.

Page 251, for *Aglæactis cupripennis parvula* read *Aglæactis cupreipennis parvula*.

Page 251, for *Aglæctis castelnaudi* read *Aglæactis castelnaudi*.

Page 253, 6th line from top, for Cat. Bds. Brit. Mus., XVI, 1892, p. 344 read Cat. Bds. Brit. Mus., XVI, 1892, p. 374.

Page 265, on the 10th and 11th lines from top, for *Heliangelus laticlavus* read *Heliangelus laticlavius*.

Page 272, on the 15th and 16th lines from top, for *Oxypogon lindenii* read *Oxypogon lindeni*.

Page 276, 5th line from top, for *Trochilus euryptera* read *Trochilus eurypterus*.

Page 283, for *Psalidoprymna gouldii gouldii* read *Psalidoprymna gouldi gouldi*.

Page 284, for *Psalidoprymna gouldii gracilis* read *Psalidoprymna gouldi gracilis*.

Page 284, for *Psalidoprymna gouldii chlorura* read *Psalidoprymna gouldi chlorura*.

Page 285, 10th line from bottom, for *S. albigularis* read *S. albogularis*.

Page 287, for *Heliothrix aurita phainolæma* read *Heliothryx aurita phainolæma*.

Page 294, for *Calliphlox mitchellii* read *Calliphlox mitchelli*.

Page 294, 2nd line from top, for *Trochilus mitchellii* read *Trochilus mitchelli*.

Page 297, 5th line from top, for San Bernadino and 13th line from bottom, for San Bernadina read San Bernardino.

Page 297, for *Archilochus violijugulum* read *Archilochus violajugulum*.

Page 304, for *Stellula caliope* read *Stellula calliope*.

Page 304, 12th line from top, for *Trochilus* (*Calothorax*) *caliope* read *Trochilus* (*Calothorax*) *calliope*.

Page 304, 13th line from bottom, for *Trochilus minima* read *Trochilus minimus*.

Page 306, 1st and 5th line from bottom, for *Cephallepsis* read *Cephallepis*.

Page 313, for *Popelairia langsdorffi melanosteron* read *Popelairia langsdorffi melanosternon*.

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